

The Journal

of the Michigan State Medical Society

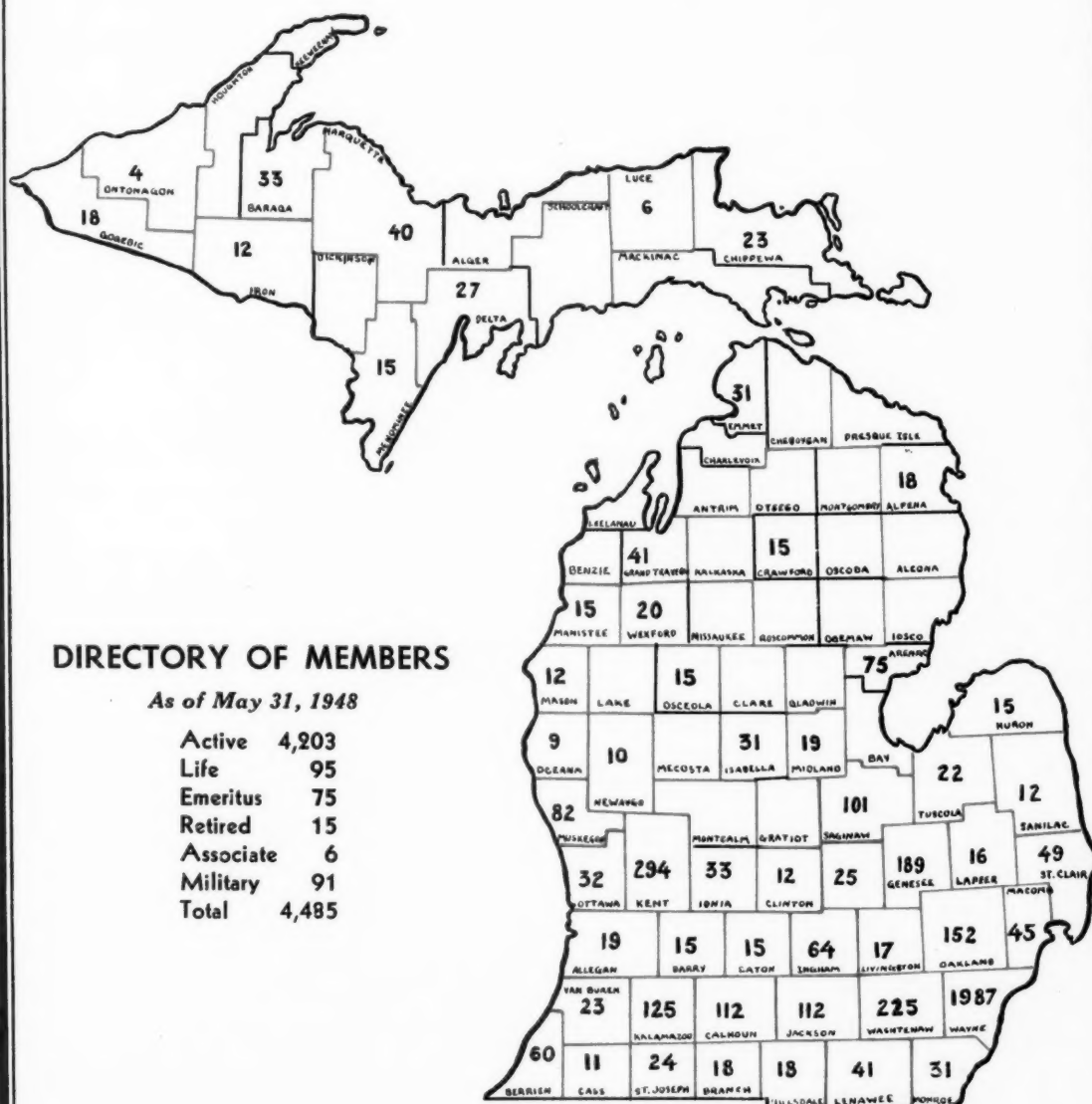


Volume 47

July, 1948

Number 7

Roster Number – 1948



Membership Totals of Component County Medical Societies

(See Roster beginning on Page 773)

Reliance



AMPOULE NO. 1
SODIUM CHLORIDE
BROCHER
MADISON
0.5% SOL
8415
MADE IN U.S.A.

Table of Contents

Newer Concepts in the Diagnosis of the Glaucomas. <i>H. Saul Sugar, M.D.</i>	721	Compulsory Health Insurance.....	753
Osteochondritis Dissecans and Osteochondromatosis. <i>Leland L. Swenson, M.D.</i>	728	Drafting Doctors.....	754
Benign Pulmonary Histoplasmosis. <i>Russell F. Weyher, M.D.</i>	737	Unethical Doctors.....	754
Aims and Purposes of the Specialty Boards. <i>J. Stewart Rodman, M.D.</i>	741	Committee Reports.....	755
The Nursing Problem. <i>T. P. Murdock, M.D.</i>	745	Michigan State Medical Society, Detroit, September 22-24, 1948, Technical Exhibits.....	767
Nursing—Service Aspects. <i>Janet M. Geister, R.N.</i>	747	Roster, Michigan State Medical Society.....	773
President's Page: Licensure to Practice.....	751	Woman's Auxiliary.....	792
Editorial: Untrue Truths.....	752	News Medical.....	794
"You and Your Doctor".....	752	The Doctor's Library.....	811
		You and Your Business.....	698
		Political Medicine.....	702
		PR in Practice.....	704
		Cancer Comment.....	706
		Editorial Opinion.....	708

Copyright, 1948, by Michigan State Medical Society

HACK SHOES

WILL BE EXHIBITED

M.S.M.S. September 23-25

The busy doctor's substitute for a detail call is a visit with our representative to discuss problems in proper shoeing arising in practice.

HACK SHOE COMPANY

Shoe fitters to the profession since 1916

Fifth Floor, Stroh Bldg. - 28 West Adams Avenue

Detroit 26, Michigan

THE JOURNAL

of the Michigan State Medical Society

VOLUME 47

JULY, 1948

NUMBER 7

PUBLICATION COMMITTEE

FRED H. DRUMMOND, M.D., *Chairman*.....Kawkawlin
DEAN W. MYERS, M.D.....Ann Arbor
E. A. OAKES, M.D.....Manistee
C. E. UMPHREY, M.D.....Detroit
WILFRID HAUGHEY, M.D.....Battle Creek

Office of Publication
2642 University Avenue
Saint Paul 4, Minnesota

Editor

WILFRID HAUGHEY, M.D.
610 Post Bldg., Battle Creek, Michigan

Secretary and Business Manager of THE JOURNAL

L. FERNALD FOSTER, M.D.
Thorne Bldg., 919 Washington Ave.
Bay City, Michigan

Executive Secretary

WM. J. BURNS, LL.B.
2020 Olds Tower, Lansing 8, Michigan

All communications relative to exchanges, books for review, manuscripts, should be addressed to Wilfrid Haughey, M.D., 610 Post Bldg., Battle Creek, Michigan.

All communications regarding advertising and subscriptions should be addressed to Wm. J. Burns, 2642 University Avenue, Saint Paul 4, Minnesota, or 2020 Olds Tower, Lansing 8, Michigan. Telephone 57125.

Copyright, 1948, by Michigan State Medical Society

Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 4, Minnesota. Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, \$5.00; single copies, 50 cents. Additional postage: Canada, \$1.00 per year; Pan-American Union, \$2.50 per year; Foreign, \$2.50 per year.

PRINTED IN U.S.A.

OFFICERS OF THE SOCIETY

1947-48

President.....P. L. LEDWIDGE, M.D.....Detroit
President-Elect.....E. F. SLADEK, M.D.....Traverse City
Secretary.....L. FERNALD FOSTER, M.D.....Bay City
Treasurer.....A. S. BRUNK, M.D.....Detroit
Speaker.....J. S. DeTAR, M.D.....Milan
Vice Speaker.....R. H. BAKER, M.D.....Pontiac

THE COUNCIL

O. O. BECK, M.D., *Chairman*, Birmingham
W. E. BARSTOW, M.D., *Vice Chairman*, St. Louis
L. FERNALD FOSTER, M.D., *Secretary*, Bay City

	District	Term Expires
C. E. UMPHREY, M.D.	1st.....Detroit	1951
P. A. RILEY, M.D.	2nd.....Jackson	1950
WILFRID HAUGHEY, M.D.	3rd.....Battle Creek	1950
R. J. HUBBELL, M.D.	4th.....Kalamazoo	1951
J. D. MILLER, M.D.	5th.....Grand Rapids	1951
R. C. POCHERT, M.D.	6th.....Owosso	1951
T. E. DeGURSE, M.D.	7th.....Marine City	1952
W. E. BARSTOW, M.D.	8th.....St. Louis	1952
E. A. OAKES, M.D.	9th.....Manistee	1952
F. H. DRUMMOND, M.D.	10th.....Kawkawlin	1952
ROY H. HOLMES, M.D.	11th.....Muskegon	1948
A. H. MILLER, M.D.	12th.....Gladstone	1948
W. H. HURON, M.D.	13th.....Iron Mountain	1948
D. W. MYERS, M.D.	14th.....Ann Arbor	1949
O. O. BECK, M.D.	15th.....Birmingham	1950
E. R. WITWER, M.D.	16th.....Detroit	1950
J. S. DeTAR, M.D.	.....Speaker	Milan
P. L. LEDWIDGE, M.D.	.....President	Detroit
E. F. SLADEK, M.D.	.....President-Elect	Traverse City
L. FERNALD FOSTER, M.D.	.....Secretary	Bay City
A. S. BRUNK, M.D.	.....Treasurer	Detroit

EXECUTIVE COMMITTEE OF THE COUNCIL

O. O. BECK, M.D.....Chairman
W. E. BARSTOW, M.D.....Vice Chairman
F. H. DRUMMOND, M.D.....Chairman, Publication Committee
E. R. WITWER, M.D.....Chairman, Finance Committee
J. D. MILLER, M.D.....Chairman, County Societies Committee
J. S. DeTAR, M.D.....Speaker, House of Delegates
P. L. LEDWIDGE, M.D.....President
E. F. SLADEK, M.D.....President-Elect
L. FERNALD FOSTER, M.D.....Secretary

SECTION OFFICERS

Medicine

G. T. McKean, M.D.....Detroit
Chairman
B. B. Bushong, M.D.....Traverse City
Secretary

Surgery

Edward Dowdle, M.D.....Detroit
Chairman
D. B. Hagerman, M.D.....Grand Rapids
Secretary

Gynecology and Obstetrics

P. W. Willits, M.D.....Grand Rapids
Chairman
M. M. Rozan, M.D.....Lansing
Secretary

Dermatology and Syphilology

J. H. Cobane, M.D.....Detroit
Chairman
H. H. Holman, M.D.....Detroit
Secretary

Delegates

W. D. Barrett, M.D., Detroit.....1948
T. K. Gruber, M.D., Eloise.....1948
C. R. Keyport, M.D., Grayling.....1948
L. G. Christian, M.D., Lansing.....1949
W. A. Hyland, M.D., Grand Rapids.....1949

Radiology, Pathology Anesthesiology

J. E. Lofstrom, M.D.....Detroit
Chairman (Rad.)
H. J. VanBelois, M.D.....Grand Rapids
Secretary (Anes.)
D. H. Kaump, M.D.....Detroit
Secretary (Path.)

General Practice

E. M. Pettis, M.D.....Muskegon
Chairman
E. C. Long, M.D.....Detroit
Secretary

Ophthalmology and Otolaryngology

W. S. Jones, M.D.....Menominee
Chairman (Oto.)
Walter Rundles, M.D.....Flint
Co-Chairman (Ophth.)
W. K. Slack, M.D.....Saginaw
Secretary (Oto.)
Don Marshall, M.D.....Kalamazoo
Co-Secretary (Ophth.)

DELEGATES TO A. M. A.



Pediatrics

J. H. Lewis, M.D.....Wyandotte
Chairman
R. H. Trimby, M.D.....Lansing
Secretary

Urology

W. L. Sherman, M.D.....Detroit
Chairman
C. F. Schroeder, M.D.....Detroit
Secretary

Public Health and Preventive Medicine

G. C. Stucky, M.D.....Charlotte
Chairman
O. K. Engelke, M.D.....Ann Arbor
Secretary

Nervous and Mental Diseases

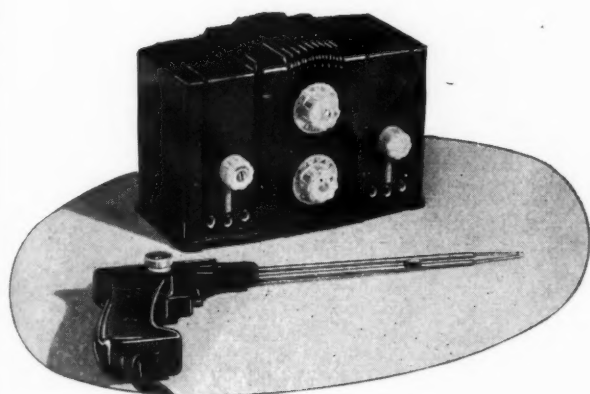
H. A. Luce, M.D.....Detroit
Chairman
R. P. Sheets, M.D.....Traverse City
Secretary

Alternates

R. L. Novy, M.D., Detroit.....1948
R. H. Denham, M.D., Grand Rapids.....1948
C. I. Owen, M.D., Detroit.....1948
R. A. Johnson, M.D., Detroit.....1949
H. H. Cummings, M.D., Ann Arbor.....1949

WAPPLER ELECTROMEDICAL EQUIPMENT

~ ~ ~ *Immediately Available*



C-200 WAPPLER MAJOR CAUTERY

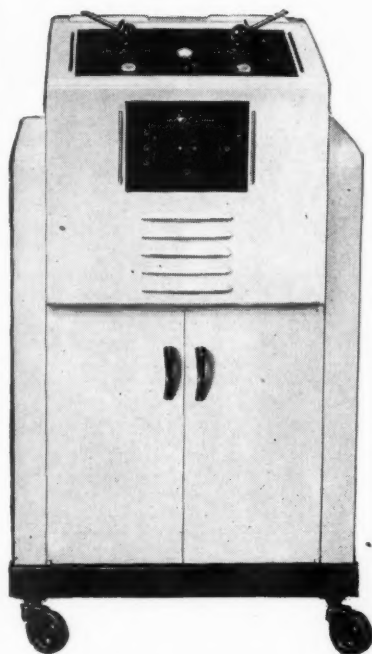
Cauterization procedures facilitated by separate controls for cautery and light regulation. Finely balanced pistol grip handle illuminates operative field. Trigger switch provides facile manipulation.

THE WAPPLER SURGICAL UNIT

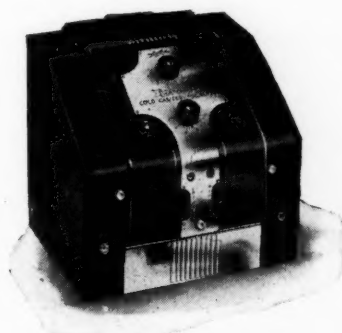
Accepted as a standard of comparison of modern electro-surgical equipment in all branches of general surgery when employment of tissue cutting and haemostatic current is indicated.

Features:

Abundant power for severing tissue in both air and fluid media generated at low voltage. Simplicity of control and operation — dual-pedalled footswitch permits instant selection of current setting. Spark gap circuit is self-compensating for temperature changes, consequently requires no adjustment.



C-263 Wappler Surgical Unit



C-450 WAPPLER COLD CAUTERY

Popular, low-priced, portable yet powerful, high-frequency unit generating cutting and coagulating currents which may be precisely controlled in intensity.

"For Finer Equipment"

Randolph Surgical

SUPPLY COMPANY

PHYSICIANS AND HOSPITAL SUPPLIES

60 COLUMBIA ST. WEST • CADILLAC 4180 • FOX THEATRE BUILDING • DETROIT 1, MICH.

MSMS Committee Personnel

Legislative Committee

L. A. Drolett, <i>Chairman</i>	Lansing
E. C. Baumgarten.....	Detroit
William Bromme.....	Detroit
W. A. Chipman.....	Detroit
T. S. Conover.....	Flint
E. F. Ducey.....	Grand Rapids
H. B. Fenech.....	Detroit
D. L. Finch.....	Battle Creek
Nicola Gigante.....	Detroit
T. K. Gruber.....	Eloise
E. D. King.....	Detroit
O. B. McGillicuddy.....	Lansing
W. F. Mertaugh.....	Sault Ste. Marie
H. L. Morris.....	Detroit
E. W. Schnoor.....	Grand Rapids
E. F. Sladek.....	Traverse City
J. G. Slevin.....	Detroit
E. S. Thornton.....	Muskegon
R. V. Walker.....	Detroit
George Waters.....	Port Huron
A. V. Wenger.....	Grand Rapids
J. F. Whinery, Jr.....	Grand Rapids

Committee on Distribution of Medical Care

C. W. Colwell, <i>Chairman</i>	Flint
R. H. Baker.....	Pontiac
H. F. Dibble.....	Detroit
E. M. Vardon.....	Detroit
J. A. Witter.....	Highland Park

Maternal Health Committee

R. B. Kennedy, <i>Chairman</i>	Detroit
E. H. Beernink.....	Grand Haven
W. H. Boughner.....	Algonac
A. M. Campbell.....	Grand Rapids
W. G. Hoebeke.....	Kalamazoo
S. T. Lowe.....	Battle Creek
W. B. Mitchell.....	Detroit
W. F. Seeley.....	Detroit
L. C. Spademan.....	Detroit
P. E. Sutton.....	Royal Oak
P. W. Willits.....	Grand Rapids

Preventive Medicine Committee

W. S. Reveno, <i>Chairman</i>	Detroit
J. K. Altland.....	Lansing
G. D. Cummings.....	Lansing
H. H. Cummings.....	Ann Arbor
J. M. Dorsey.....	Detroit
H. H. Gay.....	Midland
R. W. Kempton.....	Saginaw
R. B. Kennedy.....	Detroit
C. E. Lemmon.....	Detroit
R. D. McClure.....	Detroit
R. M. McKean.....	Detroit
N. F. Miller.....	Ann Arbor
H. M. Pollard.....	Ann Arbor
L. W. Shaffer.....	Grosse Pte. Woods
Frank Van Schoick.....	Jackson

Cancer Control Committee

N. F. Miller, <i>Chairman</i>	Ann Arbor
J. K. Altland.....	Lansing
M. R. Burnell.....	Flint
D. C. Burns.....	Petoskey
L. A. Campbell.....	Saginaw
E. I. Carr.....	Lansing
A. E. Hammond.....	Detroit
Eugene Hand.....	Saginaw
L. E. Holly.....	Muskegon
A. A. Humphrey.....	Battle Creek
W. A. Hyland.....	Grand Rapids
C. H. Keene.....	Ann Arbor
H. F. Mattson.....	Hillsdale
A. B. McGraw.....	Detroit
H. L. Miller.....	Detroit
H. M. Nelson.....	Detroit
C. A. Payne.....	Grand Rapids
H. M. Pollard.....	Ann Arbor
H. W. Porter.....	Jackson
H. R. Prentice.....	Kalamazoo
W. W. Sawyer.....	Hillsdale
H. L. Sigler.....	Howell
H. L. Smith.....	Detroit
H. J. VandenBerg.....	Grand Rapids
F. L. Rector, <i>Secretary</i>	Ann Arbor
F. A. Collier, <i>Advisor</i>	Ann Arbor

Joint Committee on Infectious Diarrhea

G. D. Cummings, <i>Chairman</i>	Lansing
Bernard Bernbaum.....	Detroit
J. H. Lewis.....	Wyandotte
R. K. Whiteley.....	Detroit

Child Welfare Committee

R. M. Kempton, <i>Chairman</i>	Saginaw
Moses Cooperstock.....	Marquette
Carleton Dean.....	Lansing
A. M. Hill.....	Grand Rapids
J. L. Law.....	Ann Arbor
R. J. Mason.....	Birmingham
A. L. Richardson.....	Detroit
R. S. Simpson.....	Battle Creek
L. P. Sonda.....	Detroit
Kenneth Wells.....	Spring Lake

Committee on Venereal Disease Control

L. W. Shaffer, <i>Chairman</i>	Grosse Pte. Woods
R. S. Breakey, <i>Vice Chairman</i>	Lansing
K. A. Alcorn.....	Bay City
A. C. Curtis.....	Ann Arbor
W. B. Harm.....	Detroit
Ruth Herrick.....	Grand Rapids
M. J. Holdsworth.....	Grand Rapids
R. J. Holmes.....	Muskegon
H. L. Keim.....	Detroit
E. S. Parmenter.....	Rogers City
Frank Stiles.....	Lansing

Committee on Tuberculosis Control

C. E. Lemmon, <i>Chairman</i>	Detroit
J. L. Egle.....	Gaylord
Cameron Haight.....	Ann Arbor
P. J. Howard.....	Detroit
W. L. Howard.....	Battle Creek
H. G. Huntington.....	Howell
G. T. McKean.....	Detroit
V. C. Johnson.....	Detroit
J. D. Littig.....	Kalamazoo
E. J. O'Brien.....	Detroit
L. A. Pratt.....	Detroit
R. A. Rasmussen.....	Grand Rapids
J. W. Towey.....	Powers
B. R. Van Zwaluwenburg.....	Grand Rapids

Iodized Salt Committee

R. D. McClure, <i>Chairman</i>	Detroit
B. E. Brush.....	Detroit
L. W. Gerstner.....	Kalamazoo
D. E. Lichty.....	Ann Arbor
R. C. Moehlig.....	Detroit
L. E. Showalter.....	Cadillac
H. A. Towsley.....	Ann Arbor
W. R. Young.....	Lawton

Industrial Health Committee

H. H. Gay, <i>Chairman</i>	Midland
A. L. Brooks.....	Detroit
W. P. Chester.....	Detroit
Henry Cook.....	Flint
W. A. Dawson.....	Inkster
V. S. Laurin.....	Muskegon
K. E. Markuson.....	Lansing
J. D. Miller.....	Grand Rapids
N. W. Scholle.....	Muskegon Heights
C. D. Selby.....	Detroit
H. T. Sethney.....	Menominee
M. W. Shellman.....	Grand Rapids
E. C. Sites.....	Port Huron
F. B. Williamson.....	Ypsilanti
J. L. Zemans.....	Detroit

Mental Hygiene Committee

J. M. Dorsey, <i>Chairman</i>	Detroit
R. G. Brain.....	Flint
F. P. Currier.....	Grand Rapids
M. W. Hoffman.....	Detroit
R. A. Morter.....	Kalamazoo
B. M. Murphy.....	Jackson
R. P. Sheets.....	Traverse City
R. W. Waggoner.....	Ann Arbor

(Continued on Page 696)

Committee on Health and Degenerative Diseases

R. M. McKean, <i>Chairman</i>	Detroit
C. B. Beeman.....	Grand Rapids
D. R. Boyd.....	Muskegon
J. R. Brink.....	Grand Rapids
B. B. Bushong.....	Traverse City
M. S. Chambers.....	Flint
F. P. Currier.....	Grand Rapids
J. M. Dorsey.....	Detroit
R. A. Johnson.....	Detroit
F. D. Johnston.....	Ann Arbor
Mark Marshall.....	Ann Arbor
E. W. Meredith.....	Port Huron
J. M. Murphy.....	Detroit
A. E. Vogelin.....	Detroit

Ethics Committee

G. B. Hoops, <i>Chairman</i> (1949).....	Detroit
A. J. Baker (1949).....	Grand Rapids
L. O. Geib (1948).....	Detroit
L. C. Harvie (1950).....	Saginaw
L. J. Morand (1951).....	Detroit
R. S. Morrish (1950).....	Flint
W. E. Nesbitt (1951).....	Alpena

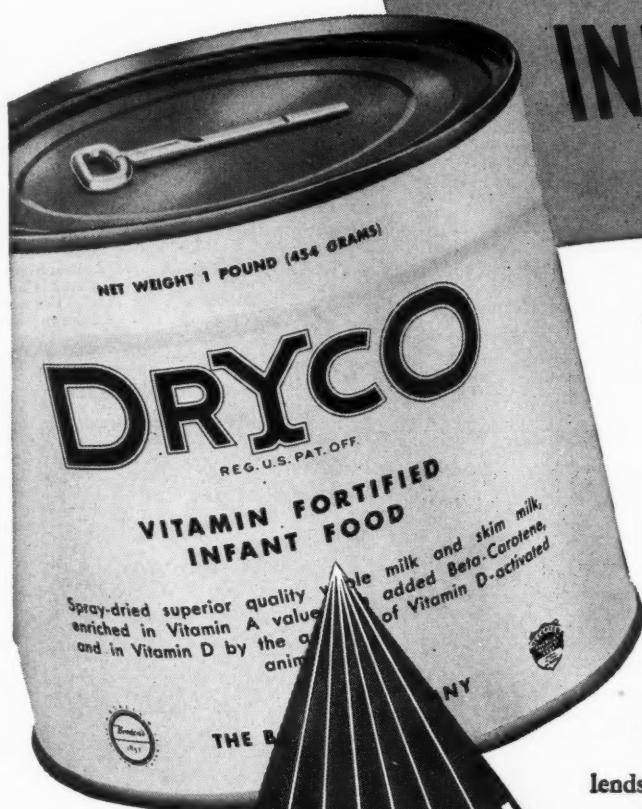
Committee on State Veterans Affairs

L. E. Sevey, <i>Chairman</i>	Grand Rapids
G. C. Penberthy, <i>Vice Chairman</i>	Detroit
W. W. Babcock.....	Detroit
C. W. Brainard.....	Battle Creek
O. A. Brines.....	Detroit
Wm. Bromme.....	Detroit
W. C. C. Cole.....	Detroit
W. C. Ellet.....	Benton Harbor
H. B. Fenech.....	Detroit
James Fyvie.....	Manistique
J. V. Fopeano.....	Kalamazoo
R. F. Hague.....	Flint
S. W. Hartwell.....	Muskegon
J. E. Ludwick.....	Jackson
K. S. McIntyre.....	Hastings
H. C. Mitchell.....	Grand Rapids
W. E. Nesbitt.....	Alpena
C. I. Owen.....	Detroit
F. H. Power.....	Traverse City
C. W. Reutter.....	Bay City
Paul Schrier.....	Kalamazoo
J. M. Sheldon.....	Ann Arbor
R. W. Teed.....	Ann Arbor
J. M. Wellman.....	Lansing
Stuart Yantema.....	Saginaw

Public Relations Committee

L. W. Hull, <i>Chairman</i>	Detroit
C. L. Candler, <i>Vice Chairman</i>	Detroit
G. T. Aitken.....	Grand Rapids
E. W. Blanchard.....	DeKerville
A. F. Bliesmer.....	St. Joseph
A. S. Brunk.....	Detroit
J. S. DeTar.....	Milan
Douglas Donald.....	Detroit
L. F. Foster.....	Bay City
N. J. Frenn.....	Bark River
W. G. Gamble.....	Bay City
W. J. Herrington.....	Bad Axe
L. T. Henderson.....	Detroit
L. E. Holly.....	Muskegon
W. S. Jones.....	Menominee
C. R. Keyport.....	Grayling
J. S. Lambie.....	Pontiac
J. J. Lightbody.....	Detroit
J. E. Livesay.....	Flint
J. J. McCann.....	Ionian
H. J. Meier.....	Coldwater
E. B. Miller.....	Manistee
F. J. O'Donnell.....	Alpena
E. S. Oldham.....	Breckenridge
F. A. Osius.....	Detroit
C. A. Payne.....	Grand Rapids
F. R. Reed.....	Three Rivers
W. Z. Rundles.....	Flint
R. F. Salot.....	Mt. Clemens
G. B. Saltonstall.....	Charlevoix
A. E. Schiller.....	Detroit
A. H. Steele.....	Paw Paw
R. W. Teed.....	Ann Arbor
Arch Walls.....	Detroit
C. L. Weston.....	Owosso
D. B. Wiley.....	Utica
G. A. Zindler.....	Battle Creek

THE HIGH-PROTEIN INFANT FOOD



The incidence of mild protein deficiencies in children, predisposing toward infections and edema, is reported^{1,2} much greater than generally realized. Infant and adolescent requirements—not only for tissue repair and maintenance, but also for growth—are much higher than in adulthood.³ To insure adequate protein intake in infancy, DRYCO—Borden's high-protein infant food—is ideally suited as a basis for formula building. It furnishes *all the essential amino acids*. Its low fat content minimizes gastro-intestinal upsets due to fat intolerance, while its intermediate carbohydrate content lends itself for prescription with or without added carbohydrate. Quickly soluble in cold or warm water, DRYCO contains adequate vitamins A, B₁, B₂ and D, plus essential milk minerals.

References: 1. Dodd, K. and Minot, A. S.: *J. Pediat.*, 8:442, 1936.
2. Dodd, K. and Minot, A. S.: *J. Pediat.*, 8:452, 1936.
3. Sahyun, M.: *Am. J. Dig. Dis.*, 13:59, 1946.

BORDEN'S PRESCRIPTION PRODUCTS DIVISION
350 Madison Avenue, New York 17, N. Y.

In Canada write The Borden Company, Limited
Spadina Crescent, Toronto.

DRYCO is made from spray-dried, pasteurized, superior quality whole milk and skim milk. Provides 2500 U.S.P. units vitamin A and 400 U.S.P. units vitamin D per reconstituted quart. Supplies 31½ calories per tablespoon. Available at all drug stores in 1 and 2½ lb. cans.



*The "Custom Formula"
High Protein Infant Food*

MSMS Committee Personnel

(Continued from Page 694)

Medical Legal Committee

S. W. Donaldson, *Chairman*.....Ann Arbor
C. E. Lemen.....Traverse City
F. A. Mercer.....Pontiac
W. B. Mitchell.....Grand Rapids
W. J. Stapleton, Jr.....Detroit

Committee on Rheumatic Fever Control

Frank VanSchoick, *Chairman*.....Jackson
N. E. Clarke.....Detroit
Carleton Dean.....Lansing
L. F. Foster.....Bay City
Thomas Francis, Jr.....Ann Arbor
L. P. Ralph.....Grand Rapids
A. M. Roche.....Calumet
H. H. Riecker.....Ann Arbor
C. J. Smyth.....Eloise
Mr. P. C. Angove.....Detroit

State Interprofessional Committee

W. W. Babcock, *Chairman*.....Detroit
V. C. Abbott.....Pontiac
C. S. Clarke.....Jackson
S. T. Flynn.....Flint
S. W. Hartwell.....Muskegon
L. C. Harvie.....Saginaw
K. P. Hodges.....Lansing
R. G. Laird.....Grand Rapids
Edwin C. Miller.....Bay City
G. W. Slagle.....Battle Creek

Postgraduate Medical Education Committee

H. H. Cummings, *Chairman*.....Ann Arbor
E. I. Carr, *Vice Chairman* (1949).....Lansing
B. R. Corbus (1949).....Grand Rapids
G. J. Curry (1950).....Flint
W. B. Fillinger (1949).....Ovid
A. C. Furstenberg (1948).....Ann Arbor
C. B. Gardner (1948).....Lansing
R. H. Holmes (1948).....Muskegon
H. A. Kemp (1948).....Detroit
P. A. Riley (1949).....Jackson
J. M. Robb (1948).....Detroit
J. M. Sheldon (1950).....Ann Arbor
E. D. Spalding (1950).....Detroit
F. A. Weiser (1950).....Detroit
C. P. Drury, *Advisor* (1948).....Marquette
J. J. Walch, *Advisor* (1948).....Escanaba

Beaumont Memorial Committee

F. A. Collier, *Chairman*.....Ann Arbor
F. C. Kidner.....Detroit
A. W. Lescohier.....Detroit
H. C. Mayne.....Cheboygan

Committee on Scientific Work

L. F. Foster, *Chairman*.....Bay City
(Plus Section Officers)

Scientific Radio Committee

H. M. Pollard, *Chairman*.....Ann Arbor
D. K. Barstow.....St. Louis
R. E. Boucher.....Royal Oak
T. T. Callaghan.....Detroit
H. A. Kemp.....Detroit
J. H. McMillan.....Monroe
S. G. Meyers.....Detroit
Kenneth Toothaker.....Lansing

Committee on Nurses Training Schools

C. G. Clippert, *Chairman*.....Grayling
R. L. Haas.....Ann Arbor
H. D. McEachran.....Iron Mountain
E. A. Oakes.....Manistee
W. J. Smith.....Cadillac
R. A. Springer.....Centerville
D. W. Thorup.....Benton Harbor

Advisory Committee to Woman's Auxiliary

T. P. Clifford, *Chairman*.....Detroit
T. G. Amos.....Detroit
Alfred LaBine.....Houghton
C. W. Oakes.....Harbor Beach
P. A. Riley.....Jackson

AN ADDED

Urine Analysis
Blood Chemistry
Hematology
Special Tests
Basal Metabolism
Serology
Parasitology
Mycology
Phenol Coefficients
Bacteriology
Poisons
Court Testimony

Send for
Fee List

Service

to the Medical Profession

SIX HOUR PREGNANCY TEST

THE SAME dependable service you have always found at Central Laboratories is now available on a *six hour pregnancy test*—the GONESTRONE Test.

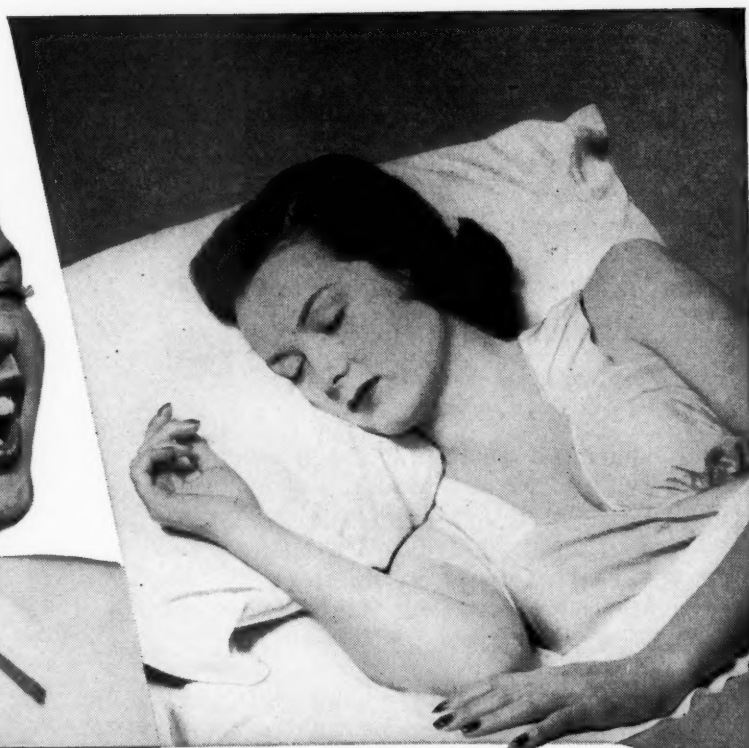
The latest and most reliable of the tests for determining pregnancy, the GONESTRONE is a modification of the Aschheim-Zondek and Friedman Tests, and was originated by Drs. Salmon, Geist, Frank and Salmon. In approximately 1,000 comparative tests made during the past year in our research department, we have found the GONESTRONE to be almost 100 per cent accurate.

In this, as in other clinical tests and chemical analyses made in our laboratories, your work will be handled with thoroughness and exactitude. . . . Your patients will find pleasant, well-equipped examining rooms. . . . You will approve our fees.

Directors: Joseph A. Wolf
Dorothy E. Wolf . . .

Central Laboratories
Clinical and
Chemical Research
312 David Whitney Building
Detroit 26, Michigan

Telephones: Cherry 1030. (Res.) Evergreen 1220



HAY FEVER *relief* day and night...

The extra long action of Neo-Synephrine hydrochloride makes possible control of hay fever symptoms with infrequent dosage, thus enabling the patient to be comfortable during the day and obtain sleep at night.

Average dose: 2 or 3 drops in each nostril.

No appreciable interference with ciliary action. Virtually no side reactions.

FOR NASAL USE: $\frac{1}{4}\%$ solution (plain and aromatic), 1 oz. bottles; 1% solution, 1 oz. bottles; $\frac{1}{2}\%$ water soluble jelly, $\frac{5}{8}$ oz. tubes.

FOR OPHTHALMIC USE: $\frac{1}{8}\%$ low surface tension, aqueous solution, isotonic with tears, 15 cc. bottles.

NEO-SYNEPHRINE[®]
HYDROCHLORIDE
Brand of phenylephrine hydrochloride

Winthrop-Stearns INC.
NEW YORK 13, N. Y. WINDSOR, ONT.

Neo-Synephrine, trademark reg. U.S. & Canada

JULY, 1948

Say you saw it in the Journal of the Michigan State Medical Society

697

You and Your Business

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of May 19, 1948

- Monthly financial reports and bills payable were presented, studied and approved.
- Public Relations Committee Chairman L. W. Hull, M.D., Detroit, reported on conference in Washington, D. C., between an MSMS Committee and the Medical Director of the United Mine Workers on union's so-called health and welfare fund.
- Report on Basic Science Law administration and the B.S. Board's recent establishment of reciprocity with Iowa, was presented by President P. L. Ledwidge, M.D. Basic Science and graduate training in hospitals was discussed.
- Reports accepted from the Legislative Committee concerning the Special Session of 1948, from the Mental Hygiene Committee (two meetings), Committee on MSMS Dues Structure, Post-graduate Medical Education Committee, Public Relations Committee, Committee on Emergency Medical Service, Cancer Control Committee, Committee on Rheumatic Fever Control, Committee on Standards for Medical Office Assistants of the Department of Public Instruction, and also on the Michigan Congressional Dinner held in Washington, D. C., in April.
- Report on nation-wide USPHS-sponsored meetings with hospital administrators re Federal Hospital Survey and Construction Act was presented. Commendation was given MSMS Liaison Committee with Michigan Hospital Association on its effective work of co-operation.
- Joint meeting with Michigan's eight Delegates to AMA was held and six matters for reference to AMA House of Delegates were discussed and agreed upon—including resolution re Blue Cross and AMA employees' coverage.
- R. L. Novy, M.D., Detroit, Wilfrid Haughey, M.D., Battle Creek, and E. F. Sladek, M.D., Traverse City, appointed a Committee to attend Chicago meeting called to consider the merging of Blue Cross and Blue Shield.
- President Ledwidge reported 262 new members had been certified to AMA as the result of the MSMS Membership Month campaign held in April, 1948.
- Secretary instructed to congratulate Congressman Harness on his fearless exposé of misuse of Federal funds to encourage socialization.
- Appropriate action on California Medical Asso-

ciation telegram, advising of Governor Earl Warren's plan for compulsory health insurance, was taken.

- Monthly reports of President P. L. Ledwidge, M.D., President-Elect E. F. Sladek, M.D., Secretary L. Fernald Foster, M.D., General Counsel J. Joseph Herbert, and Public Relations Counsel H. W. Brenneman accepted.
- The Chair expressed thanks to the members of the Executive Committee for their good advice and understanding patience during this ten-hour session of the Executive Committee.

OVER A MILLION COVERED BY MMS

Enrollment in Michigan Medical Service, the Blue Cross Plan for prepaid medical-surgical care, went over the million mark on May 1. Figures as of May 1 bring the number of subscribers to 1,100,000, an increase of approximately 250,000 persons over the number enrolled in 1946.

Among the factors to which Blue Cross enrollment officials attribute the increase is the 1947 liberalization of the Blue Cross medical-surgical certificate, which provides for care in the doctor's office and out-patient department of a hospital where the fee, in accordance with the MMS Schedule of Benefits, is \$20 or more.

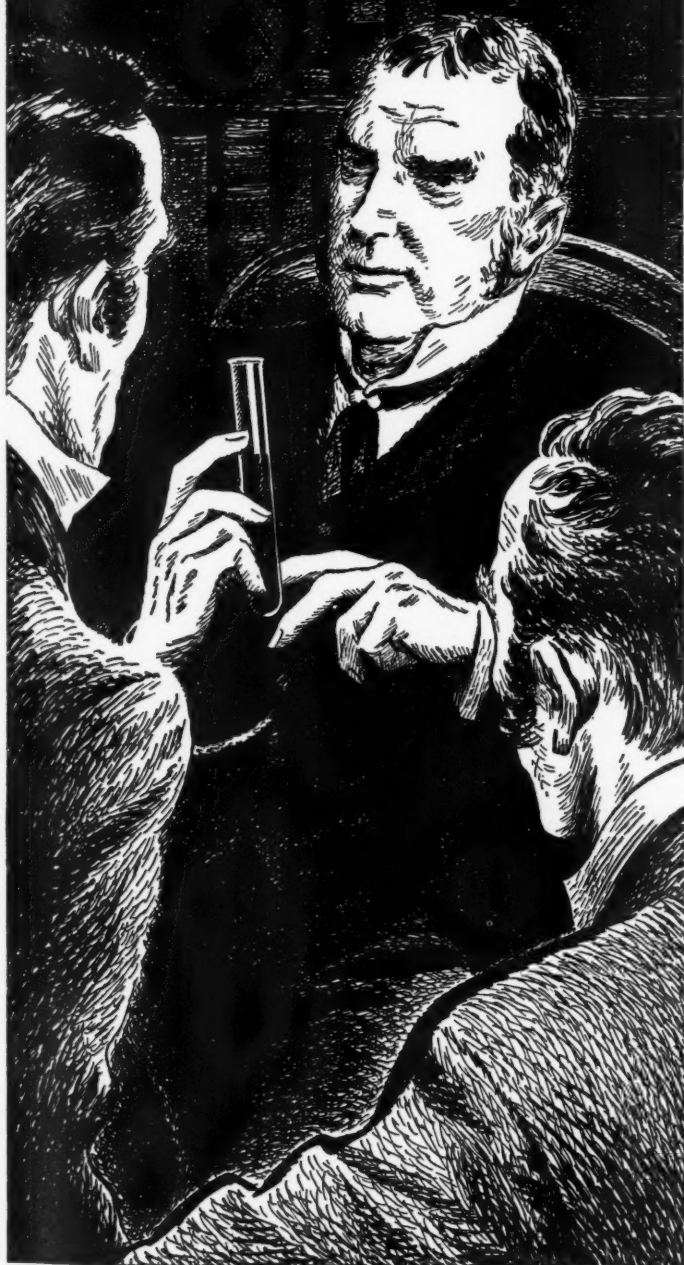
Another factor of significance given for the increase is an expanding acceptance of the Blue Cross program. The subscriber must be a member of Michigan Hospital Service, companion organization to Michigan Medical Service, in order to be eligible for the medical-surgical plan, as both organizations, with certain exceptions, provide benefits only to the subscriber who is a bed-patient in the hospital. Companies which have been enrolled in Michigan Hospital Service are gradually passing from the "experimental period" of the enrollment, have found Blue Cross satisfactory, and are interested in providing the broader benefits of medical and surgical protection for their employees.

Co-operation of members of the Michigan State Medical Society with Blue Cross on community enrollments has its public education aspects. Initial purpose of the community enrollments is to make Blue Cross protection available to those persons ordinarily not eligible for Blue Cross membership, as Blue Cross is usually available only to established groups of five or more employees.

Co-operating in a county-wide Blue Cross enrollment in Clinton County in December were W. B. McWilliams, M.D., chief of staff of Clinton Memorial Hospital, and S. R. Russell, M.D.,

(Continued on Page 700)

Experience is the Best Teacher



William Withey Gull
(1816-1890)

proved it in pathology

SIR William Gull is medically recognized for his many original observations which led to his classic description of myxedema and a greater understanding of nephritis. He also added much to the fundamental knowledge of neuropathology—such as his observations that locomotor ataxia was a disease of the posterior columns of the spinal cord. Medical knowledge was greatly enriched by Gull's experiences.

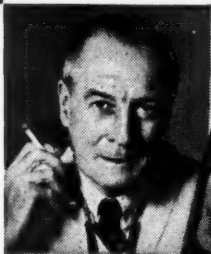
Experience is the best teacher in cigarettes, too!

Yes, Experience is what counts—just as it always has. And with millions of smokers who have tried and compared many different brands of cigarettes, Camel is the "choice of experience."

Try Camels! Discover for yourself how the rich, full flavor of Camel's choice, properly aged and expertly blended tobaccos pleases your taste. See if Camel's cool, cool mildness isn't mighty welcome to your throat.

Let your own experience tell you why *more people are smoking Camels than ever before.*

R. J. Reynolds Tobacco Co.
Winston-Salem, N. C.



According to a Nationwide survey:
More Doctors
Smoke CAMELS
than any other cigarette

Three independent research organizations in a nationwide survey asked 113,597 doctors what cigarette they smoked. The brand named most was Camel!

JULY, 1948

Say you saw it in the Journal of the Michigan State Medical Society

OVER A MILLION COVERED BY MMS

(Continued from Page 698)

president of the Clinton County Medical Society.

On the Blue Cross committee for a community enrollment held in South Haven and Bangor in February were E. H. Terwilliger, M.D., chief of staff of South Haven Hospital, M. W. Buckborough, M.D., and Avison Gano, M.D.

The Upper Peninsula will have an opportunity for a Blue Cross community enrollment within the next few weeks. All such enrollments, it is emphasized by Blue Cross officials, are being undertaken only where there is a request from the local hospital and doctors.

AMA COMMITTEE'S REPORT ON HOSPITAL PRACTICE OF MEDICINE

"The practice of medicine by hospitals has been a moot subject for many years. . . . This has applied particularly to the four specialties of anesthesiology, pathology, radiology and physical therapy. . . . It would appear that at least we should insist upon the following: (1) recognition that the specialties of pathology, radiology, anesthesiology and physical therapy are the practice of medicine; (2) all specialists in a hospital should be under the jurisdiction of the medical board; (3) all specialists should be on the staff of the hospital and be represented on the medical board; (4) conditions of employment will vary locally and they must have the approval of the medical board of the hospital, whose responsibility it should be to see that these provisions are carried out; (5) the interests of the general public should be paramount and local conditions must be taken into consideration; (6) there must be co-operative understandings with the hospitals and specialists groups, and (7) it is recommended that the AMA House of Delegates request the Board of Trustees to appoint a committee to study the various resolutions passed previously by the House and that this committee be directed to arrange conferences with the hospital associations and the various specialist societies, in order that a solution may be worked out which will be fair to all parties and redound to the benefit of the public."

MICHIGAN'S SUCCESSFUL IMMUNIZATION CAMPAIGN

The State-wide immunization campaign against small pox, diphtheria, whooping cough and tetanus was inaugurated February 15 and ran for a period of forty-five days.

The comments of the Michigan Department of Health on this successful campaign, inaugurated by the Michigan State Medical Society, follow:

"Michigan's immunization campaign which got under way during February, 1948, has met and is still meeting

with encouraging success. Although no figures are available at this time on the exact number of children immunized, the State Health Department records show that enough biologic products were distributed by that agency during February to protect approximately 100,000 children. This does not take into account the quantities of commercial products used during the period. It is estimated that there are 600,000 preschool children in the state.

"There is no over-all pattern for the administration of the program. Details have been worked out on individual city, county or district bases between the health department directors and the physicians in those areas. In most places the work is done co-operatively—some parents take their youngsters to the offices of their health department; others go to their physicians' offices. In a few areas, the immunizations are done in the schools by the private physicians or the health officers.

"The Michigan Department of Health has received a number of reports on the program from health officers in many areas of the state indicating that the campaign has been statewide in its scope. All of these reports implied close co-operation between local health departments and local medical societies.

"Newspapers, both weekly and daily, have taken a very active part in the promotion of the campaign. Editorial comment of these papers has done much to add to the success of the program."

SICKNESS CLAIM BLANK SANS RED TAPE

The following model sickness claim blank, developed by the American Medical Association Council on Medical Service, has been drafted to the end that all necessary information is provided the insurance company but that unnecessary data and red tape are eliminated:

ATTENDING PHYSICIAN'S STATEMENT—SICKNESS

Blank Insurance Company
100 Main St., Chicago, Ill.

Patient's Name
Address

1. Diagnosis—Please explain complications, if any.
2. When did patient first consult Date 19
3. When did first symptoms appear? Date 19
4. What operation was performed, From 19 To 19
5. Was patient confined to the house? From 19 To 19
- Was patient confined to a hospital?
- Name of hospital?
6. Dates of treatments? Office
7. When was, or will patient be, Home:
- able to resume any part of his Date 19
- work?

If you wish to amplify, please use this space.

Date.....19.....

Signed

Attending Physician

Street and Number Town State

(Continued on Page 702)

Diagnosis
WITHOUT Disturbance
in cholecystography

When gallbladder pathology is suspected,
accurate roentgenologic demonstrations
of normal, malfunctioning and calculous
organs afford decisive information
to physician and surgeon.



PRIODAX

(brand of iodoaliphonic acid)

convenient oral contrast medium for gall-
bladder visualization, permits precise diagnosis
by a simplified technic causing little or no
discomfort to most patients.

Six 0.5 Gm. tablets after a light, usually fat-free
evening meal constitute the sole preparation
required for PRIODAX* cholecystography.

No involved dietary prescriptions or
adjuvant premedication with alkalies, pressor
agents or paregoric are necessary.

PACKAGING: PRIODAX, beta-(4-hydroxy-3,5-diiodophenyl)-
alpha-phenyl-propionic acid, is supplied in envelopes
of six 0.5 Gm. tablets, available in boxes of 1, 5, 25 and
100 envelopes, each bearing instructions for the
patient. Hospital Dispensing Packages contain
4 rolls of 250 tablets each.

*®

Schering
CORPORATION • BLOOMFIELD, NEW JERSEY
IN CANADA, SCHERING CORPORATION LIMITED, MONTREAL



(Continued from Page 700)

RESOLUTION ON NONPROFIT PREPAYMENT MEDICAL CARE PLANS

WHEREAS, the American Medical Association on many occasions has encouraged the formation of nonprofit voluntary prepayment hospitalization and medical service plans by its constituent state and county societies; and

WHEREAS, these constituent state and county societies have participated in the formation and development of nonprofit voluntary hospitalization programs (nationally known as Blue Cross hospitalization plans) and nonprofit medical surgical service programs (nationally known as Blue Shield plans); and

WHEREAS, the action of the American Medical Association in canceling its contract with the Chicago Blue Cross and Blue Shield plans which provided hospitalization and medical surgical coverage for the employees of the American Medical Association and in contracting with a commercial insurance company for the same coverage was not in the best interest of the medical profession as a whole or the voluntary Blue Cross and Blue Shield plans; and

WHEREAS, this action of the American Medical Association has already by adverse publicity caused serious embarrassment to the Blue Cross and Blue Shield plans; therefore be it

RESOLVED, That the House of Delegates of the

American Medical Association instruct its Board of Trustees to immediately cancel the contract with the commercial insurance company and reinstate the contract with the Blue Cross and Blue Shield plans.—*Resolution, Missouri State Medical Association, J.A.M.A., May 8, 1948.*

CHICAGO MEDICAL SOCIETY OFFERS POSTGRADUATE COURSES

The Chicago Medical Society is sponsoring two postgraduate courses in September to be given in Thorne Hall on the campus of Northwestern University Medical School, Lake Shore Drive and Superior Street, Chicago.

The first course in "Hematology and Neurology" will be given the week of September 13-18, 1948. The second course in "Cardiovascular and Respiratory Diseases" will be offered the week of September 20-25.

Distinguished faculties of fifty-eight members from all over the United States will give the courses. There will be lectures, round tables, and intermissions which will give those taking the courses opportunity to meet and talk with the faculty.

Both courses are limited to 100 and are open to physicians in good standing in their local medical societies. For copy of program and application write Dr. Willard O. Thompson, Chairman, Committee on Postgraduate Medical Education, Chicago Medical Society, 30 North Michigan Avenue, Chicago 2.

Political Medicine

S. RES. 249 MARKS THE END OF THE W-M-D ERA OF NATIONAL HEALTH LEGISLATIVE PROPOSALS

The complete text of S. Res. 249 is given below. It brings to a conclusion some 60-odd public hearings on compulsory sickness insurance, extending over three years and covering S. 1606 of the 79th Congress and S. 1320 of the 80th Congress.

"Resolved, That the Senate Committee on Labor and Public Welfare is hereby authorized and directed through the Subcommittee on Health of the said committee to—

"(a) continue its study of the health problems of the Nation and of legislative proposals relating thereto which have been referred to the said subcommittee, which study shall be primarily concerned with ascertaining the full extent and nature of existing national health problems and the action, if any, which the Federal Government should take in relation to said problems;

"(b) consult, in the course of such study, with Federal agencies administering health and related programs, with such other legislative committees of the Senate as are concerned with related matters, and with such other agencies, organizations, or persons as the subcommittee may desire to consult;

"(c) report to the Senate not later than March 15, 1949, the results of the study, together with such pro-

posed legislation, if any, and such other recommendations as the subcommittee may deem desirable.

"Sec. 2 (a) The Senate Committee on Labor and Public Welfare, through the said Subcommittee on Health, is authorized to sit and act at such times and in such places during the sessions, recesses, and adjourned periods of the Eightieth Congress, to employ such consultants, clerical, and other assistance, to procure such printing and binding, to require by subpoena or otherwise the attendance of such witnesses and the production of such books, papers, and documents, to administer such oaths, to take such testimony, and to make such expenditures, within the limits below set forth, as it deems advisable. The cost of stenographic services to report such hearings shall not be in excess of 25 cents per hundred words.

"(b) The expenses incurred under this resolution, which shall not exceed \$10,000, shall be paid from the contingent fund of the Senate upon vouchers approved by the chairman of the committee."

FULL-SALARIED SERVICE

The B.M.A. is not able legally to act as a trade union, and in a nationalized service the need for such a protective body is glaringly necessary, and the sooner the better.—*Editorial, British Medical Journal, May 22, 1948.*

POUR DIRT AWAY

with
Rexair

Wouldn't you like to get rid of dusty vacuum bags forever? Wouldn't you like to pour dust away as easily as dirty dishwater?

You can, with Rexair—the amazing new home appliance that collects dust in water instead of a bag. You just pour the water down the drain and flush—dust and dirt go with it.

When you clean with Rexair, you clean *clean*. Rexair has no porous bag through which dust can escape back into the air you breathe. Instead, the air passes through a churning bath of water which wets down the dust and returns only dust-free air to the room. Wet dust cannot fly, and dust cannot escape from Rexair's water basin.

Rexair does dozens of household jobs. Rexair cleans rugs, drapes, and upholstery; scrubs, rinses, and dries floors; dusts furniture; waxes and moth-proofs. Rexair improves even the air you breathe—takes in dust and dirt-laden air and fills the room with clean, washed air.



Advertised in
AMERICAN
MEDICAL
ASSOCIATION
PUBLICATIONS



FREE BOOK

Learn more about Rexair! Send for this free, illustrated 12-page book. Shows how Rexair does dozens of household jobs, how it even cleans the air you breathe. Ask for as many copies as you need.

Rexair

REXAIR DIVISION, MARTIN-PARRY CORP.
Box 964, Toledo 1, Ohio Dept. F-7

Send me _____ copies of your free booklet, "Rexair—The Modern Home Appliance Designed to Hospital Standards", for my own use and for my patients.

NAME _____

ADDRESS _____

CITY _____

ZONE _____

STATE _____

PR in Practice

Second Rural Health Conference

The Second Annual Rural Health Conference is planned for September 16 and 17 on the campus of Michigan State College. H. B. Zemmer, M.D., Lapeer, announced following a meeting of the Committee on Arrangements in Lansing on May 27.

Last year's conference, sponsored by the Michigan State Medical Society and co-sponsored by medical and lay groups interested in improving health services for rural residents, attracted widespread interest in Michigan, and has since set the pattern for similar action in other states.

Representatives of the sponsoring agencies will meet in July to plan the program for this year's conference. Suggested discussion topics include the federal aid program for hospital construction, the "Medical Associates" project, improving rural health through the schools, and health and hospital insurance.

First Rural Health Conference Brochures

The brochure of the first Michigan Rural Health Conference and a review of the progress of the activities called for by the resolutions of the 1947 Conference have been completed and are now being distributed. Copies may be obtained by writing Michigan Rural Health Conference, 2020 Olds Tower, Lansing 8, Michigan.

Cinema Progress Report

After a final check and double-check, the script for the motion picture prepared by Mr. Frank Goldman under the direction of the MSMS Committee on Cinema is ready for filming by the Jam Handy Corporation of Detroit. The completed picture will run ten minutes on the screen and is expected to be released before September.

It is anticipated that over a million persons will see the picture when it is distributed through the motion picture theaters of Michigan.

Arrangements have been made for the Metropolitan Life Insurance Company's moving picture "Be Your Age" to be shown in Michigan's theaters with a trailer outlining the MSMS Rheumatic Fever Control activities. The picture deals with the nature and characteristics of heart disease. The pamphlet "Your Child is Safer in Michigan" will be distributed in the theaters where the picture is shown through the co-operation of the Michigan Society for Crippled Children and Adults, Inc.

"Tell Me, Doctor"

The "Tell Me, Doctor" program is now being heard over twenty-two Michigan radio stations. The new additions are WJRP Ishpeming, WBCM Bay City, WTCM Traverse City, WDBC Escanaba, and WHRV Ann Arbor.

AMA Exhibit

The MSMS panel, which was a part of the "Rural Child Health" exhibit at the AMA convention in Chicago the week of June 21, shows by means of a photographic mural how the MSMS is co-operating with the health program of the Congress of Parents and Teachers by the establishment of Rheumatic Fever Control Centers, Sex Education Instruction programs, Immunization drives and training of Medical Associates.

Beaumont Memorial Shrine

A project to establish a Beaumont Memorial Shrine on Mackinac Island is being considered. Tentative plans are that the Early House will be rebuilt in its original form. Funds for the project will be obtained from voluntary sources.

The Council of the MSMS will consider the part the Society can play in this project at its meeting of July 22, 23, and 24.

It is felt by many that the restoration of this historical building will serve to acquaint thousands of people with the labors of individual M.D.s in aiding mankind to achieve a longer, fuller, and healthier life.

Woman's Auxiliary

The Woman's Auxiliary to the MSMS has completed a comprehensive public relations program for 1949. The plan sets forth the general over-all objectives of the Auxiliary, and suggests specific projects which may be undertaken by the various county auxiliaries.

Among these projects are plans for promoting the concept of Medical Associates among the young people of Michigan; assisting the Blue Cross-Blue Shield Plans in community enrollment drives; helping other health groups in their campaigns; and spurring the recruitment of nursing students.

P. R. Plan Receives "Legal" Recognition

Glenn R. Winters, Secretary of the American Judicature Society and editor of its Journal, addressed the Indiana State Bar Association on July 10, using the Michigan State Medical Society Public Relations program as an example of "what can be done." Mr. Winters termed the MSMS projects "extremely successful."

MEAT

And the Dietary of Pregnancy and Lactation

According to a study published in the recent past¹ it has been shown that nitrogen balance is suddenly reversed from positive to negative shortly before term. This negative balance is further intensified by substantial losses of nitrogen during parturition and the postpartum period. Lactation imposes still another burden on nitrogen metabolism.

This study again emphasizes the need for a diet rich in biologically complete protein during the latter half of pregnancy. In this manner, the physiologic loss of nitrogen at term can be compensated, avoiding negative nitrogen balance. A high protein diet has the further advantage of producing a more copious milk supply.

In another recent publication,² the prevention of the toxemias of pregnancy by dietary means was stressed. Foremost among the measures recommended was a diet rich in high quality protein to assure nitrogen balance.

Meat is an outstanding source of protein in the dietary of pregnancy and lactation for these four reasons: (1) It is notably rich in protein, from 17 to 20 per cent of its uncooked, and from 25 to 30 per cent of its cooked weight; (2) The protein of meat, regardless of cut or kind, is biologically complete; (3) The appetite appeal of meat is high, and (4) All meat is of excellent digestibility—from 96 to 98 per cent.

¹ Stuart, H.C.: Effects of Protein Deficiency on the Pregnant Woman and Fetus and on the Infant and Child, *New England J. Med.* 236:507 (Apr. 3) 1947.

² Zeigler, R.F., Jr.: Pre-eclamptic Toxemia of Pregnancy. *North Carolina M. J.* 8:655 (Oct.) 1947.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.



American Meat Institute

Main Office, Chicago... Members Throughout the United States

Cancer Comment

MICHIGAN HOSPITAL STUDY

During the past year the Cancer Control Committee studied the hospitals of Michigan with special reference to their facilities for the diagnosis, treatment and care of cancer patients; also for their experience with cancer as a part of their general hospital load. A similar study was made of the 1933 hospital situation by the American Society for the Control of Cancer. Changes made during the intervening thirteen years are the bases of this report.

In spite of greatly aroused interest in cancer, hospitals of Michigan are finding that their cancer load has not increased proportionately over their 1933 experience. During that year cancer patients formed 2.3 per cent of the total number of patients hospitalized—maternity patients excluded—and 2.7 per cent of such patients in the same hospitals in 1946. This static condition was doubtless due in part to the greatly increased number of noncancerous patients hospitalized in 1946 compared to 1933, a year of deep economic depression.

Twenty-eight counties in Michigan have no hospitals of twenty-five beds capacity or more. In these counties but 6.1 per cent of the population is found, and, with few exceptions, this segment of the State's population is within a reasonable distance of larger hospital facilities.

Of the 118 hospitals from which data were obtained, ninety-five admit terminal cancer patients and seventy-five accept indigent cancer patients, whose expenses are paid from public or private sources.

But twenty-two hospitals have a followup program for their cancer patients, and twenty-three hospitals have a social service department. The lack of trained medical social service personnel precludes the organization of a satisfactory follow-up program for cancer patients, a service that is of importance to the welfare of the patient and to the physician in maintaining adequate and accurate records of his patients.

Ninety-three hospitals are served by pathologists who are diplomates of the American Board of Pathology, while the pathologists serving 15 hospitals are nondiplomates. Many smaller hospitals send their surgical tissues to pathologists in larger medical centers. Only one hospital reported that it was served by an out-of-state laboratory.

Ninety-one hospitals have all surgical tissues examined. Eighteen hospitals reported that only

selected surgical tissues were examined. The majority of these are hospitals of small bed capacity in which laboratory service is at a minimum.

Seventy-two hospitals are served by a radiologist who is a diplomate of the American Board of Radiology, while twenty-five hospitals reported the staff radiologist was not a diplomate. Twenty counties serving the larger population areas have deep therapy x-ray equipment in one or more hospitals within their borders. Doubtless there are similar facilities in the private offices of one or more physicians in these and other counties that were not recorded in this study.

Thirty hospitals permit any staff physician to apply radium, while in fifty-eight hospitals only the radiologist is permitted to do this.



The accompanying map of Michigan shows the location and type of service now available for the treatment and care of cancer patients. In this map the "Regional Hospital Centers" are those designated by the Michigan Hospital Survey in its report of a study made in 1946. It will be noted that in sixteen of the twenty-three proposed centers rather complete facilities are already available for service to the cancer patient.

For those interested, additional details on this study are available in the office of the Cancer Control Committee.

For surface infections . . .



Impetigo and ecthyma usually respond rapidly to topical Furacin therapy. Good results have been reported in 49 of 55 cases of impetigo^{1,2,3} and in several cases of impetigo about infected wounds.⁴ Ecthyma responded favorably in 19 of 24 cases.^{1,2} Cure of these pyodermas is often effected within eight days. Furacin N.N.R., brand of nitrofurazone, is available as Furacin Soluble Dressing and as Furacin Solution, both containing 0.2 per cent Furacin.[®] These preparations are indicated for topical application in the prophylaxis or treatment of infections of wounds, second and third degree burns, cutaneous ulcers, pyodermas and skin grafts. Literature on request. **EATON LABORATORIES, INC., NORWICH, N. Y.**

1. Downing, J. G., Hanson, M. C. and Lamb, M.: Use of 5-Nitro-2-Furaldehyde Semicarbazone in Dermatology, J.A.M.A. 133:299, 1947. 2. Robinson, H. M. and Robinson, H. M., Jr.: The Comparative Values of Some New Drugs in the Pyodermas, South. M. J. 40:409, 1947. 3. Miller, J., Rodriguez, J. and Domonkos, A.: Evaluation of Penicillin in Topical Therapy, New York State J. Med. 47:2316, 1947. 4. McCollough, N. C.: Treatment of Infected War Wounds with a Nitrofurazone. Indust. Med. 16:128, 1947.

Editorial Opinion

"After Doctors Are Socialized, Then Come Editors?"

"The same society that imposes socialized, medical practice upon doctors will not immunize newspapermen from infection with the virus of state regimentation," warns John F. James, editor of the *Johnstown* (Pa.) *Democrat*.

The evils of mass medicine, he said, include "bureaucratic inefficiency, crass professional politics, military emphasis upon rank with its relegation of skill to a secondary position, the discouragement of initiative and enterprise, submersion of personal achievement, bureaucratic red tape, and the imposition of rigid framework of the caste system."

James charged that the reason the supporters of socialized medicine have made such gains is that the public does not know the whole story. Not all people can see mass medicine practiced from the inside, James pointed out.

"The major blame for public ignorance must rest upon the medical profession, now hiding its light beneath the hoary bushel of an outgrown ethical code which frowns upon publicity as an unforgiveable violation of the Hippocratic oath," said James.

"The medical profession today needs badly to re-evaluate a public relations policy that has failed to keep pace with its progress in the world of science and with society's progress in the field of communications," James said.

"As students of human nature, doctors are aware that frequently it is not the facts and the truth that govern, but what people believe—often mistakenly—to be the facts and the truth," James warned. He went on, then, to expound his thesis that it is up to the doctors to tell their story, so that the public can appreciate the doctors' limitations and the forces affecting their availability.

James recommended news releases from local medical associations, and abandonment of the ancient anarchy of a non-publicity ethic.—*Editor and Publisher*, April 10, 1948.

Health Act Closes Twenty-seven Factories

Only one type of artificial limb is to be made in Britain under the new Health Insurance Act.

The decision means that employes in Britain's 27 artificial limb factories will be faced with the prospect of unemployment in a few weeks' time, says Mr. E. R. Desoutter, chairman of the Artificial Limb Makers' Committee of the Surgical Instrument Manufacturers' Association.

"After July 5, the supply of artificial limbs becomes a Government monopoly, and private firms cannot exist," he stated last night.

"When we asked the Ministry of Pensions what was to happen to our specialist employes many of whom have

been engaged on this work for 30 years, we were told that they would not be needed by the Ministry, and that they would be better employed in other industries concerned in the export drive.

"This is a ruthless putting out of business of many small firms. The monopoly which it will create will in a few years' time result in there being no choice of quality of products and efficiency of service.

"It is ironical that the Government, which forcibly took over our patents in 1933 should now be using them to put out of existence the companies which developed them."—*Daily Continental Mail*, Paris, France, May 25, 1948.

Retires from House of Delegates

Burt R. Shirley, M.D., Commanding Officer of Base Hospital 36, First World War, attended his last session (the twenty-eighth) as delegate of the House of Delegates at the American Medical Association meeting in Chicago, June, 1948. He represented the section on Otolaryngology. At 76 he feels he should retire. During all those years the fight against Socialized Medicine has been the most interesting from his view point.

All important laboratory examinations; including—

Tissue Diagnosis

The Wassermann and Kahn Tests

Blood Chemistry

Bacteriology and Clinical Pathology

Basal Metabolism

Aschheim-Zondek Pregnancy Test

Intravenous Therapy with rest rooms for Patients

Electrocardiograms

Central Laboratory

Oliver W. Lohr, M.D., Director

537 Millard St.
Saginaw

Phone, Dial 2-4100—2-4109

The pathologist in direction is recognized
by the Council on Medical Education
and Hospitals of the A. M. A.

The JOURNAL

of the Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME 47

JULY, 1948

NUMBER 7

Newer Concepts in the Diagnosis of the Glaucomas

By H. Saul Sugar, M.D.
Detroit, Michigan



WITH THE introduction of gonioscopic and chamber angle depth observations into recent considerations of ocular hypertension, it has become obvious that many of the older ideas about glaucoma need modification. These changes have been sufficient to require a broader concept of

the etiology, course and even the treatment of the various ocular conditions which have, in common, an elevation of intraocular pressure.

The term glaucoma does not apply to a particular ocular disease entity but rather denotes only the presence of increased intraocular pressure. Thus, glaucoma may be one of the manifestations of a large group of ocular diseases which may be called *the glaucomas*. From the viewpoint of what constitutes an increase in intraocular pressure and, therefore, glaucoma, it must be considered as that pressure which the individual eye cannot tolerate without some damage to its integrity.

Let us consider the classification of the glaucomas as a framework for the various concepts to be discussed.

Von Graefe¹² distinguished four clinical varieties of glaucoma, namely, acute glaucoma, absolute glaucoma, secondary glaucoma, and "amaurosis

with excavation of the disc" (chronic simple glaucoma). The classification in general use today is more elaborate but actually differs little from von Graefe's. It may be divided into three groups as follows:

- I. Primary or idiopathic glaucoma.
 - A. Congestive glaucoma (inflammatory, uncompensated).
 - 1. Acute.
 - 2. Chronic.
 - B. Chronic simple glaucoma (noninflammatory, compensated).
- II. Secondary glaucoma.
- III. Hydrophthalmos.

Absolute glaucoma is the end stage of any of the glaucomas and need not be included in any classification.

The weaknesses of the above classification lie in the lack of etiologic connotation and its failure to provide a cubbyhole for all the clinical varieties of glaucoma. One of the things which started my dissatisfaction with the above classification was my inability to classify properly the type of glaucoma which occasionally follows instillation of mydriatic drugs in patients with shallow anterior chambers and without previous ocular hypertension. Here the patient shows no evidence of vascular congestion, but the tonometric reading may be well over 60 mm. Hg (Schiotz). The condition is acute but not congestive, so it does not fit into either the acute congestive glaucoma or the chronic non-congestive glaucoma cubbyholes, although the latter is where many men have placed it.

A review⁷ of a series of forty-five patients with acute glaucoma was made to determine whether the presence or absence of congestion was a justifiable criterion in the classification of glaucoma. The results of the study indicated that 95.4 per

From the Wayne University College of Medicine and Receiving Hospital, Detroit. Under a grant from the W. K. Kellogg Foundation.

cent of those twenty-four cases precipitated by mydriasis (mydriatic drugs or darkness-dilatation) were free from congestion at the onset. Of the seven with acute episodes precipitated by accommodative effort, 80 per cent started without congestion. In the group of eighteen cases precipitated by vascular engorgement, presumably involving the vessels of the ciliary body, 53.3 per cent were congested from the onset. It appeared, then, that in a majority of cases of acute glaucoma, the onset was not associated with congestion, but, after a varying period of time, the eye suddenly became congested, due, probably, to the presence of histamine-like metabolic products resulting from the poor nutrition and hypoxia associated with the interference with the blood supply by the high intraocular pressure. Congestion is only a phase into which an eye with acute glaucoma may or may not enter, depending on the precipitating factors and the duration and height of the increased intraocular pressure. Therefore, the descriptive terms congestive and noncongestive and their synonyms were eliminated from the diagnosis and only appended after it as follows:

- Acute glaucoma, noncongestive phase.
- Acute glaucoma, congestive phase.
- Simple glaucoma, noncongestive phase.
- Simple glaucoma, congestive phase.

Another weakness in the generally used classification is its tendency to give the impression that the various primary glaucomas are various stages of the same disease, so that one clinical picture may change to another and then even revert back to the original type. Beginning with Raeder⁴ in 1923, there has come a separation of the two primary glaucomas of adult life into two separate entities, based on the depth of the chamber angle. This has been amply confirmed by gonioscopic evidence and by provocative mydriasis.⁷

One confusing consideration is how to classify acute glaucoma which remains unrelieved by treatment. This is still acute glaucoma which has entered a chronic phase. The term acute glaucoma is used to designate a specific entity and should be used as the diagnostic term, even though the words "chronic phase" may be appended.

The classification which I wish to present is based on an attempt to continue the time-honored terms *primary* and *secondary* glaucoma and yet maintain an etiologic viewpoint.

My first attempts at classification of the glau-

comas considered only chronic simple glaucoma as primary, since this was considered the only condition whose relation to any other ocular disease was not known. Since acute glaucoma results from a known anatomic cause, it was classified as secondary. Following this classification, it was only a step further to avoid the terms primary and secondary entirely, and simply to classify each type of glaucoma according to its causal relationships. But because we do not yet know the cause of the most important glaucoma—chronic simple glaucoma—and because of usage, I have reverted in teaching to the use of the terms primary and secondary. The primary glaucomas, according to my present concept, are those which do not follow other ocular disease. In this group are included the idiopathic chronic simple glaucoma cases and those cases caused by anatomic and developmental anomalies. The latter are subdivided into the congenital glaucomas and acute (narrow-angle) glaucoma which depends on both an anatomical predisposition^{7,9}—a narrow angle, usually associated with high hyperopia—and the normal continuous growth of the lens with increasing age, together with such physiologic angle-narrowing factors as accommodation, dilatation of the pupil, and congestion of the ciliary body.

The following classification of the glaucomas is suggested on the basis of the above definition of primary glaucomas.

A Classification of the Glaucomas

I. Primary Glaucomas.

- A. Glaucoma simplex (chronic simple glaucoma).
 - Noncongestive phase.
 - Congestive phase (rare).
- B. Glaucomas caused by anatomic and developmental anomalies.
 1. Congenital glaucomas.
 - (a) Hydrophthalmos.
 - (b) Glaucomas associated with aniridia or neurofibromatosis.
 2. Juvenile glaucoma.
 3. Acute (narrow-angle) glaucoma—due to anatomic plus physiologic angle-narrowing factors which lead to mechanical obstruction of trabecular spaces by iris. This includes acute glaucoma associated with microcornea.
 - (a) Noncongestive phase — including "dilatation glaucoma."
 - (b) Congestive phase—classical "acute congestive glaucoma" and the recurrent form called "chronic congestive glaucoma" in the older classification.

DIAGNOSIS OF THE GLAUCOMAS—SUGAR

II. *Secondary Glaucomas.* Each may be subdivided into a noncongestive and a congestive phase. Some never enter the congestive phase.

A. Secondary glaucomas due to mechanical blockage of the trabecular spaces.

1. Obstruction by iris.
 - (a) Acute secondary glaucoma due to lenticular intumescence.
 - (b) Acute secondary glaucoma due to dislocation of the lens into the anterior chamber.
 - (c) Glaucoma following operation for cataract—*aphakic obstructive glaucoma*—due to delayed reformation of the anterior chamber.
 - (d) Glaucoma associated with essential progressive atrophy of the iris.
2. Obstruction of the trabecular spaces by particulate matter.
 - (a) Glaucoma capsulare.
 - (b) Pigmentary glaucoma.
 - (c) Glaucoma due to obstruction by lens particles.
 - (d) Glaucoma due to tumor growth.
 - (e) Glaucoma due to cellular debris associated with active or healed iridocyclitis.

B. Secondary glaucomas due to lack of communication between the anterior and posterior chambers.

1. Secondary glaucoma due to seclusion of the pupil.
2. Secondary glaucoma due to total posterior synechia.

C. Secondary glaucomas probably due to overproduction of aqueous as a result of irritation of the ciliary processes.

1. Glaucoma associated with posterior dislocation of the lens so that latter touches ciliary processes.
2. Cyclitis and anterior choroiditis.

D. Secondary glaucomas due to obstruction of venous drainage.

1. Experimental and clinical glaucoma due to vortex vein obstruction.
2. Secondary glaucoma in pulsating exophthalmos.

E. Secondary glaucomas due to newly-proliferated anastomotic vessels involving the Schlemm's canal mechanism in rubeosis iridis (diabetic and arteriosclerotic) and following occlusion of the central retinal vein.

F. Secondary glaucomas resulting from trauma.

G. Secondary glaucomas associated with epidemic dropsy.

H. Secondary glaucomas associated with choroidal angioma.

A consideration of the diagnostic clinical features of each of the glaucomas would be beyond the space available in this paper. However, a consideration of the important ones, especially those which present a diagnostic problem and those about which newer concepts have arisen, will serve to describe the desired material.

Glaucoma Simplex

By far the most important of the glaucomas is the classical glaucoma simplex. The usual patient with early glaucoma simplex has no symptoms until changes in the visual fields bring the condition to his attention. Occasionally, some fog-giness of vision and diminished accommodation bring him to the oculist. Less frequently, colored halos around lights and headache are complained of. In the late stages the patient complains of night blindness, contraction of the visual fields, or even interference with macular vision.

Objectively, the ocular findings in simple glaucoma depend on the stage of the disease. The earliest findings are a slight ocular hypertension and changes in the pericecal visual field, usually manifested as a vertical increase in the size of the blindspot. As the disease progresses, the field changes increase slowly, so that various characteristic changes, such as Bjerrum's sign and Roenne's step, occur. Excavation of the optic disc begins at the temporal side of the disk. As the disease progresses, the excavation of the disc increases concurrently with contraction of the field, until only a central zone about 10 degrees in diameter remains.

If allowed to continue untreated, the tension usually remains between 30 and 45 mm. of mercury (Schiötz), and the central field is finally lost. In this state of absolute glaucoma, the eye may remain painless and pale, or may rarely, after a considerable time, suddenly enter a congestive state, in which the conjunctival vessels become injected, the eye painful and the tension high. In fact, the suddenness of the onset and the symptoms may be the same as in an eye with acute glaucoma which has entered the congestive phase.

The few eyes with early simple glaucoma which have been studied in the laboratory show no abnormalities. The late stages of unoperated simple glaucoma show only the effects of increased intraocular pressure.

The diagnosis of early simple glaucoma depends on routine tonometric studies. Tactile tension esti-

mations are so notoriously inaccurate that they cannot be termed a useful substitute for the instrumental measurements. The experience of the residents in ophthalmology at the Detroit Receiving Hospital serves to emphasize the value of routine tonometry. In March, 1947, when the present glaucoma clinic at that institution was started, there were about eighteen active glaucoma patients, all in an advanced stage. Routine tonometry on all eye clinic patients of forty years of age or over led to an increase of glaucoma patients during the first nine months to 118, a high proportion of which were in the earliest stages.

Gonioscopically, the chamber angle is normal in depth in simple glaucoma, although one occasionally finds cases of simple glaucoma in which the chamber and the angle are relatively shallow. The shallowness is coincidental, since the factors leading to relative shallowing of the chamber are present in persons of the age group affected. In the late stage of simple glaucoma in which sometimes a congestive phase appears, peripheral anterior synechias may form.

The slit lamp findings in simple glaucoma are entirely negative except in the late stages when congestive episodes may have occurred. Then the evidences of congestive and atrophic changes are seen.

The provocative tests, including the water test^{5,11} and the pressor-congestion test,² are of considerable help in the diagnosis of early cases of simple glaucoma, especially when the tonometric readings are 28 to 30 mm. Hg (Schiotz), or when the tonometric readings are lower but the history or clinical findings are suspicious. The provocative tests are significant only when positive.

In the more advanced stages the diagnosis is made on the basis of the visual fields, the tension, and the appearance of the nerve head.

Primary Acute Glaucoma

The second of the glaucomas in importance is primary acute (narrow angle) glaucoma. It is not difficult to diagnose in the full-blown congestive phase, but the differentiation in the noncongestive phase from simple glaucoma, and in the congestive phase from the secondary glaucomas, is usually difficult and of much more than academic importance. The actual onset of the noncongestive phase of acute glaucoma is hardly noticed by the patient. Blurring of vision may be noticed, especially among the younger patients. Sometimes the

onset is associated with colored halos, or slight pain in the head or in the eye. These mild symptoms usually last a half-hour to two or three hours and then subside entirely, only to recur at varying intervals, becoming more frequent and lasting longer as time goes on, each attack leaving the anatomic conditions more favorable for further attacks. The circumcorneal injection associated with these episodes is slight, if any.

Occasionally the patient finds relief from his symptoms by the use of hot or cold applications, by looking at a bright light for several minutes, or by sleep.

Ultimately, one of the mild episodes will persist longer than usual, and suddenly the patient will experience marked diminution in vision, photopsia, swelling and redness of the conjunctiva and pain in the head and the eyes, often so severe as to cause nausea and vomiting. The sudden change in symptoms often awakens the patient from sleep and occurs without any precipitating factor, it being an aggravation of the previous mild symptoms and is induced by a sudden congestion of the globe, probably as a result of the accumulation of tissue metabolites within the eye when the blood supply and drainage of the intraocular fluid is impeded due to the high intraocular pressure. At any rate, the sudden aggravation of symptoms is attributable to the combination of high intraocular pressure and increased permeability of the vascular walls.

In some cases the first mild noncongestive episode of acute glaucoma is followed by the congestive phase. Of course, if treated early with miotics, even the congestive phase subsides rapidly, and if the patient does not use miotics as a prophylactic measure, it will likely recur, the disease passing again through the noncongestive phase. What has been previously called the prodromal stage of acute glaucoma is in reality the noncongestive phase of the disease.

In many patients with episodes of primary acute glaucoma there is a history of onset of the condition following nervous shock. Many authors for this reason attribute primary acute glaucoma to a nervous cause. Actually the neurovascular factors are important only as the precipitants of the angle-blocking mechanism.

Objectively, the tension may not be different in the noncongestive and in the congestive phase. It is usually very high in the latter, since the addi-

tional vascular congestion adds to the mechanical obstruction of the angle.

Shallowness of the anterior chamber is typical of this type of glaucoma and is its predisposing anatomic factor. For this reason the nonglaucomatous fellow eye of a patient who has had an episode of primary acute glaucoma may be classified as pre-acute glaucoma. The same term may be used to describe the interim of normality between episodes of primary acute glaucoma in either the non-congestive or the congestive phase.

Shallowness of the anterior chamber in this form of glaucoma is usually associated with high or relatively high hyperopia, especially during the patient's early adult life.

When vascular decompensation occurs, it produces not only chemosis of the conjunctiva but edema of all the ocular tissues. The corneal epithelium is so involved that details in the fundus are obscured. Blebs and vesicles appear on the cornea. The cornea loses its sensitivity. In the non-congestive stage, even in the presence of very high tension, the cornea is not edematous, and arterial pulsation is easily seen in the fundus.

The pupil is dilated in both phases of acute glaucoma but is irregular in the congestive phase. The dilatation, when it is not in itself the actual etiologic factor in the onset of the disease, is probably due to slight stretching of the eyeball and to the pressure effect on the nerves. In rabbits, if a needle is inserted into the anterior chamber and the pressure increased, the pupil dilates, and it contracts when the pressure is decreased. Barkan¹ suggested that the vertically oval shape of the pupil is due to anatomic narrowness of the angle above. Undoubtedly, in the congestive phase the blood supply to a few of the nerve fibers to the sphincter is affected irregularly, and irregularity of the pupil results.

The iris in the congestive phase becomes muddy and discolored. Some of the iris vessels become visibly distended. If the congestive phase persists any length of time, fine posterior synechias may form.

The nerve head in the noncongestive phase is normal. In the congestive phase, it is red but not excavated. If repeated attacks occur or if an attack persists, the disc becomes rather rapidly excavated.

Biomicroscopy reveals abnormalities only in the congestive phase or after the eye has suffered the

effects of long-standing pressure as in simple glaucoma. Edema of the epithelium, blebs and vesicles are seen in the congestive phase. The contents of the anterior chamber and the vessels of the iris are difficult to see clearly in this phase. Chemical studies are of no etiologic significance but show only the results of the vascular changes.

In the noncongestive phase, gonioscopy reveals the contact between the iris and the trabecular wall. In the congestive phase, closure of the angle must be presumed, since the cornea is usually too cloudy for visibility.

In a person in whom a congestive attack is relieved spontaneously or with miotics, floating particles of pigment, irregularity of the pupil, occasional fine posterior synechias, and pigment on the posterior corneal surface are seen. Slight persistent pericorneal injection may be present. If a patient is seen for the first time after such an attack, the tension in the eye is usually below normal and an erroneous diagnosis of acute iritis may be made.

When the congestive phase of acute glaucoma has been allowed to exist without treatment, the eye eventually becomes blind and enters the stage common to all glaucomas, namely, absolute glaucoma. The eye remains injected, the episcleral veins remain dilated, vesicles form on the cornea and the iris remains muddy. Pain persists. Gradually, the vascular system adjusts itself somewhat, and the eye often becomes less painful.

Secondary Glaucomas

Of the secondary glaucomas, those due to obstruction of the trabecular spaces by iris deserve consideration as a group. They have the same mechanism as primary acute glaucoma. This is most obvious in the acute secondary glaucoma due to lenticular intumescence, which not only has the same mechanism but has the same clinical picture, except that only one eye is usually involved in the process, that any refractive error, even high myopia, may have been present, and that an intumescent cataract is present. An anterior chamber of normal depth in the fellow eye is an important differential sign. I have never seen a primary acute glaucoma with a normally deep anterior chamber in the fellow eye.

Secondary glaucoma following cataract operation has been proven clinically to be due to obstruction of the trabecular spaces by iris only since my preliminary report on the gonioscopic findings in 1940. It is important not only as proof for the fact

DIAGNOSIS OF THE GLAUCOMAS—SUGAR

that obstruction of the trabecular spaces can cause a rise in the intraocular pressure in humans, but in the differential diagnosis from other glaucomas occurring coincidentally in an eye which has had an

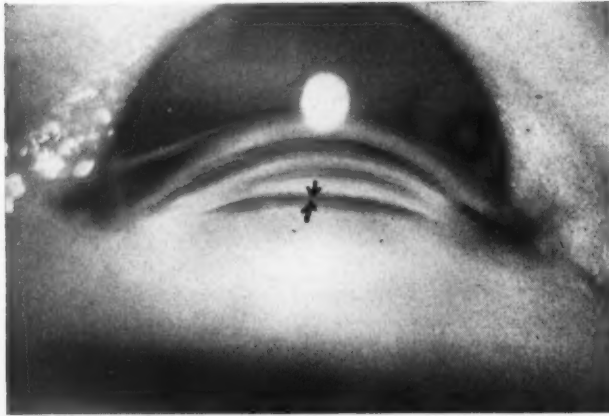


Fig. 1. Goniophotograph of the trabecular wall shows a trabecular pigment ring (between arrows) in a case of "pigmentary glaucoma."

operation for cataract. In this type of glaucoma, the obstruction of the trabecular spaces results from delayed reformation of the anterior chamber due usually to failure to obtain tight wound closure. The clinical picture varies considerably, depending on whether it occurs early or late after the operation. When it occurs early, the eye is usually congested and painful, and may be mistaken for a postoperative inflammatory process. Late onset may be free of congestion and lead to symptom-free loss of vision as in glaucoma simplex. The diagnosis depends on gonioscopy. The etiologic factor may be relieved surgically by the cyclodialysis operation in both the congestive and the noncongestive phases.

The secondary glaucomas due to obstruction of the trabecular spaces by particulate matter are of several types, depending on the obstructing material. The diagnosis in each depends on gonioscopic examination of the chamber angle. The type designated as glaucoma capsulare³ is associated in the exfoliation of the zonular lamella of the lens capsule. It is impossible, in this group, to be certain whether the capsular debris or the pigment granules deposited in the trabecular spaces, or both, are the cause for this type of glaucoma. A second type of secondary glaucoma associated with a marked deposition of pigment in the trabecular spaces, without capsular exfoliation, is a form of glaucoma which has never been described as an entity. I am designating it as *pigmentary*

glaucoma. In 1940 I mentioned⁶ a single case in a twenty-nine-year-old man with simple glaucoma in which the pigment deposition was so marked that it suggested itself as the possible cause of the increased intraocular pressure. Since then, in spite of several thousands of gonioscopic examinations, I have found only one other such case. The clinical pictures in both cases were so exactly alike and so distinctive that I am convinced that they constitute an infrequent but definite clinical entity. For this reason, a detailed description of the first case follows:

F. C., a twenty-nine-year-old man, was first seen by me on February 10, 1939. He complained of having seen colored rings about lights each time after viewing a motion picture during the previous year. His first tonometric readings were: right, 35 mm. Hg, left, 37 mm. Hg (Schiotz). His visual acuity was 20/15 each eye, corrected with -1.25 right and $-1.25+0.25 \times 90$ left. Biomicroscopically there was evidence of intraocular pigment dispersion. Pigment granules were deposited on the anterior iris surface, on the posterior surface of the cornea in the form of a Krukenberg spindle, and in the trabecular spaces to form a dense trabecular pigment ring (Fig. 1). The anterior chambers were each 3.0 mm. deep. There was no evidence of inflammation. The discs and fundi were entirely normal. The visual fields remained normal until the last ones taken on September 14, 1940, when the 1/330 white field was entirely normal, the 3/330 red field was slightly reduced on the left, and with the 2/1000 white target the left blind spot was enlarged to twice its normal size. A tension curve study was started without drops on February 10, 1939. It revealed tonometric (Schiotz) readings at 9:30 a.m. of 35 mm. right, 45 mm. left. At 12:15 p.m. the readings were 49 mm. right and 52 mm. left. Instillations of pilocarpine nitrate, 2 per cent four times daily, were started. At 3:00 p.m. the readings were 24 mm. each eye. On the following day at 10:45 a.m. the right tension was 21 mm., the left 19 mm. At 2 p.m. they were 21 mm. each eye. On the next day at 9:30 a.m. they were 19 mm. right and 22 mm. left. On continued pilocarpine therapy, the tension remained normal most of the time but varied between 37 and 18 right, and 37 and 15 left, until November 16, 1940. Seven years later, on December 15, 1947, the corrected visual acuity was still 20/20 with each eye. The tonometric readings were 43 mm. right and 28 mm. left, under 1 per cent pilocarpine three times daily. The visual fields showed only a 5° lower-nasal-field loss in the left eye (1/330 mm. target).

The second case* was that of a young man of thirty-three. The clinical picture was exactly the same as the first. His visual acuity was 20/20 each eye with $-3.25+1.75 \times 10$ right and $-2.50+1.25 \times 1.75$ left. The anterior chambers were deep. The fundi and visual fields were normal. The picture of pigment dispersion was evidenced

*This patient was seen by me through the courtesy of Dr. Fleming A. Barbour of Flint, Michigan.

DIAGNOSIS OF THE GLAUCOMAS—SUGAR

by a Krukenberg spindle and a trabecular pigment ring. The response to homatropine was unfavorable, raising the tension to 50 mm. Hg each eye. On pilocarpine, the readings varied between 25 and 28 mm.

evidence of increased protein in the aqueous may decrease or even be biomicroscopically absent. The diagnosis is important in that the intraocular pres-

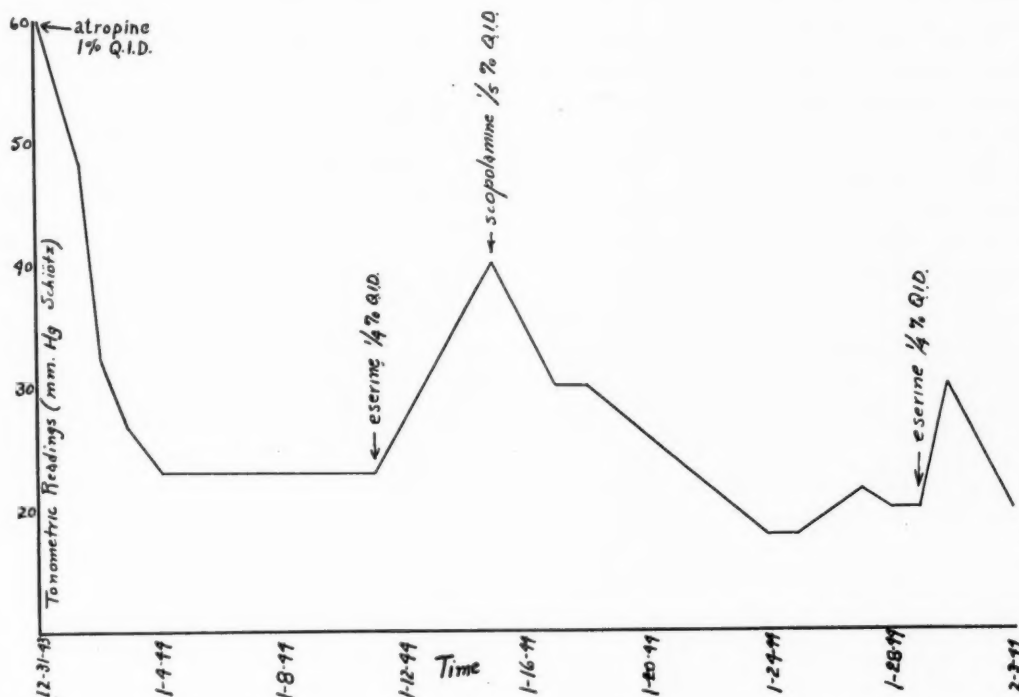


Fig. 2. Graphic representation of the effect of cycloplegics and miotics in the treatment of cyclitic secondary glaucoma.

Secondary glaucoma due to obstruction by cellular debris in the angle is difficult to differentiate from simple glaucoma when the antecedent iridocyclitis is completely inactive. Only the history of a previous iridocyclitis and the gonioscopic and biomicroscopic findings suggest the possible cause. If the condition is and remains unilateral, the diagnosis is more probably correct. In this case the treatment is exactly the same as that for simple glaucoma, both medically and surgically.

The secondary glaucoma associated with cyclitis or anterior choroiditis is probably due to an overproduction of aqueous and is usually temporary, lasting only as long as the irritative inflammatory process persists in a relatively quiet form. It is interesting that early in these inflammatory processes, when the eye is congested, the intraocular tension is usually lower than normal, as in ordinary acute iritis. This is presumably due to a general vasodilation involving the iris and ciliary body. As the inflammatory process appears to subside and the eye becomes relatively paler or completely white, the intraocular pressure rises. Deposits on the posterior corneal surface increase, even though

sure responds favorably to atropine or scopolamine and not usually to miotics. This type of response was well shown in the following case:

S. V., a twenty-five-year-old man, was first seen by me on December 31, 1943. He had been entirely well until July, 1943, when he began to notice fogging of vision, first in the left eye and later in both eyes. Examination revealed a bilateral chronic granulomatous iridocyclitis. The visual acuity was 20/30 right, 20/20 left. The tonometric readings were 21 mm. Hg (Schiötz) right and 60 mm. left. Both eyes were rather pale. Atropine, 1 per cent, was instilled into the left conjunctival sac three times daily. The response to cycloplegics was favorable, to eserine unfavorable, as shown in Figure 2. The tension stayed normal from February 3, 1944, until a recurrence of the iridocyclitis appeared in June, 1946. This episode responded in a similar manner to scopolamine.

One other secondary glaucoma will be considered since some new thoughts concerning it have appeared. This is the secondary glaucoma associated with rubeosis iridis, and following occlusion of the central retinal vein. From the viewpoint of mechanism both of these are exactly the same.⁸ The chamber angle early is open and shows the

same new-formed vessels lining the angle and penetrating the angle wall. Later the angle becomes blocked by adhesion between the iris root and the trabecular wall. The earliest case of this type I have seen was in a patient with a blind painful glaucomatous eye with diabetic rubeosis iridis, in whose other eye very localized small areas of rubeosis became evident near the pupil border and in a portion of the angle as the tension rose in that eye to 36 mm. Hg (Schiötz). The angle was entirely open. The new-formed vessels lining the small areas of the angle could be seen penetrating the trabecular wall, presumably to anastomose with Schlemm's canal. The occurrence of this condition in an eye with poor nutrition and hypoxia, as a result of severe vascular disease, suggests a causal relationship. The formation of new-formed vessels is stimulated, causing anastomoses with Schlemm's canal and in some way destroying the usefulness of this mechanism. The treatment of this form of glaucoma is cyclodiathermy for the pain, or enucleation. The presence of the new-formed vessels may lead to spontaneous hemorrhages (hence the term hemorrhagic glaucoma). When surgical treatment is attempted, these vessels nearly always preclude success.

Occasionally one finds a combination of two forms of glaucoma in the same patient. This has been described as mixed glaucoma.¹⁰ Mixed primary acute glaucoma and glaucoma capsulare occur. Simple glaucoma and secondary glaucoma following central vein occlusion have appeared together. There may even appear a superimposition of primary acute glaucoma coincidentally on the background of a simple glaucoma, though this is extremely rare.

Summary

A new classification of the glaucomas based on clinical evidence is suggested. The classification is arranged so as to include the same groupings into primary and secondary glaucoma which usage has made universal.

The diagnostic features of those forms of glaucoma where newer concepts have appeared, and of one form not hitherto described as an entity, are presented. The latter is designated as *pigmentary glaucoma*.

Emphasis is placed on routine tonometry in all patients forty years of age or over to make early

(Continued on Page 810)

Osteochondritis Dissecans and Osteochondromatosis

By Leland L. Swenson, M.D.
Grand Rapids, Michigan

OSTECHONDRITIS dissecans and osteochondromatosis are two affections of joints that are uncommonly encountered. These closely allied but distinct pathological entities are listed among the various conditions producing free bodies within joints.

Osteochondritis dissecans is a noninfectious sequestration of a segment of subchondral bone within a joint. It is a disease primarily of young adults, with males predominating in incidence, three to one. Eighty-five per cent of the cases are of the knee joint. The elbow, hip, ankle, shoulder, metatarsal-phalangeal joints, carpal scaphoid and lumbar vertebra have been reported as affected by this entity. Involvement is usually unilateral although bilateral cases have been observed. Seven cases have been critically studied in this hospital.

There has been much discussion in the literature concerning etiology since Munro in 1726 first noted a loose body in the knee joint with a defect in the medial condyle of the femur. He attributed this to external trauma.

Contributions adding to the knowledge of this entity have been made by Broca in 1854, Paget in 1875, and Koenig who in 1905 coined the term now employed to designate the condition. Axhausen, in 1912, suggested that blood vessels were damaged from repeated impaction of opposing articular surfaces with resultant necrosis. A zone of absorption was said to follow, with a gradual separation and extrusion of the dead portion of the articular surface.

In 1917, nine cases were recorded by Brackett. In most of these, the patients knelt at their work. It is interesting to note that in one of these case presentations, the sequestered body had become attached to the posterior cruciate ligament. Kappis, in 1920, advanced the theory that detachment occurred from repeated impaction between articular surfaces of femur and tibia, thus repeating in effect Axhausen's ideas. Kappis considered that torsion was a factor. Freiberg, in 1932, stressed

Presented before the Kent County Medical Society, Grand Rapids, Michigan, November 11, 1947.

the role of a large tibial spine in several of his cases which he thought may have entered into the number of factors necessary to produce the condition. (Study of the lateral projections of cases in this hospital, compared with anatomical material, indicated that the site of the lesion occurred in a plane anterior and medial to the intercondyloid eminence. Impingement in these particular cases seemed anatomically improbable.)

In 1924, Phemister produced evidence seemingly to disprove the purely traumatic origin of loose bodies. He cited the behavior of chip fractures which almost never remain free in the joint, but become attached to synovial membrane. They are, as a rule, absorbed within a few months. Experimentally, pieces of bone and cartilage chipped off and reinserted into their beds became reattached in nearly all instances. Testing Axhausen's theory, Phemister and others do not report evidence of vascular occlusion. Sections demonstrated bone and cartilage in the living state, although bony separation was complete or almost so and had existed as such for a considerable time before removal for examination. Slow necrosis does occur when the body has been extruded into the joint. Experimenting with radium, Phemister found that instead of the tissue sloughing, reparative changes occurred, with creeping substitution of the dead portion by new bone. He concluded that the process is the result of non-union following incomplete or subchondral fracture between cartilage and bone, or through bone, with subsequent severance of the cartilaginous bridge either by trauma or absorption.

Conway, in 1937, pointed out the insensitiveness of cartilage and underlying bone. In the case of the knee joint, he thought that trauma could be transmitted through the patella, and, acting through the cushion of the articular cartilage, could split off, fissure, or chip, a portion of the femoral condyle, thus initiating the process. Freund, in 1939, held that the condition in the hip joint is not a clinical entity but the result of a secondary complication during the period of reorganization which primarily aims at complete substitution of a more or less extensive area of epiphyseonecrosis. Ribbing, in 1944, postulated the presence of a superficial accessory nucleus of bone.

It should be noted that Knaggs discussed bacterial embolism as a possible cause. Endocrine disturbances such as hypothyroidism are occasionally

said to be associated with changes in the articular cartilage similar to osteochondritis dissecans. To date, there are no known reasons why the ends of long bones are so consistently involved. Though there are numerous theories as to the etiology of osteochondritis dissecans, most authors are willing to admit that trauma does play a role in the development of this condition.

Osteochondromatosis is a somewhat more rare condition involving the irritated synovial membrane with the formation of osseocartilaginous structures (synovial chondrification). These may be attached to the villous tips, lie free within the joint or be extruded into periarticular tissues.

The onset of the disease apparently occurs during late childhood or early adulthood, although the diagnosis may not be known until later in life. It is a disease primarily of males. The knee joint is most commonly affected, the elbow second in frequency. Bunne reported a total of eighty cases appearing in the literature up to July, 1929. One of these was of the hip joint to which Bunne added two cases, both in men over sixty years of age. Rixford added one of the knee in 1930. Colonna presented four females with involvement of the knee joint in 1931. Vincent and Vincent were able to collect 111 cases in the literature in 1931. H. B. Macey added one case adjacent to the psoas tendon in 1934. Jalet in 1937 discussed one of the hip, secondary to osteochondritis juvenalis. Freund presented three cases of "chondromatosis of the joints" in 1937, one of the shoulder and two of the hip. Wiberg, in 1938, and Sato, in 1939, are referred to in the literature as discussing osteochondromatosis of the hip joint, but no mention of case reports is made. Wilmoth in 1941 presented a series of nine cases; six of these involved the knee joint, two of the elbow and one of the hip. Apparently 125 cases have been reported in the literature of osteochondromatosis, seven of which involved the hip joint. It is of interest that only three cases in this series had involvement of two joints. One of the three cases studied in this hospital had involvement of the hip joint, one had bilateral involvement of the knee joints.

Attention was called by Laënnec, in 1813, to the relationship between loose bodies and synovial membrane. He believed that they arose from the subsynovia. Sir Benjamin Brodie, in 1836, thought that the loose bodies arose from the external surface of the synovial membrane. Lexer, in 1907,

suggested that they developed from embryonal rests. Whitelocke, in 1914, believed that fibrous tags hanging from the synovial membrane became cartilaginous. He thought this change could occur as a result of inherent embryonic potentialities, implying metaplasia. Henderson, in 1917, and Henderson and Jones, in 1923, considered osteochondromatosis to be a nonmalignant neoplasm. Little weight was given to the purely traumatic theory of origin. Jones offered a case study in 1927 as definite support for the theory that synovial chondromatosis is a neoplastic manifestation. The formation of cartilage in this case followed closely the embryonic method of development of cartilage from undifferentiated connective tissue.

Boehm, in 1928, reviewed the four principal theories of the cause of osteochondromatosis: (1) infectious, (2) traumatic, (3) embryonic, and (4) neoplastic. He concluded that osteochondromatosis is similar in nature to a benign tumor and that trauma cannot be excluded as a factor in its origin. Rixford, in 1930, was of the opinion that trauma seems unlikely as a specific single cause. Geschickter, in 1930, considered that trauma probably functioned in disturbing precartilaginous connective tissue in the synovial membrane and that there is a definite connection between osteochondromatosis and normal developmental processes in the tissues. Freund, in 1937, stated that the process is similar to that of myositis ossificans—a metaplastic hyperplasia of connective tissue. Here again are numerous conjectures in relation to the etiology. The majority of opinions however seem to favor a metaplasia of abnormal synovial membrane (hypertrophic villous synovial membrane) probably initiated by trauma.

Anatomical Considerations and Pathology

Osteochondritis dissecans occurs most frequently in the knee joint, on the anterolateral margin of the medial condyle. The structural arrangement of the femur is such that the longitudinal trabeculae gradually assume curved paths near the distal end of the femur and end perpendicularly with respect to the articular surface at every point. The lower end of the femur transmits loads carried through a hinged joint. In addition to the primary hinged action of the joint, rotation occurs to lock the joint and complete extension. This produces a grinding force due to the pivoting of the tibia on the extended femur.

A similar grinding force occurs in the elbow, directed against the capitellum of the humerus as the arm is thrown forward from the cubitus valgus position into the extended position. Bennett describes this entity involving the elbow in young professional baseball pitchers as an occupational disease. King and Richards suggest a similar action, i.e., a grinding rotational force in relation to the development of osteochondritis dissecans of the superolateral aspect of the caput femoris.

Cryslar and Morton described six cases of the disease in the supratrochlear septum of the humerus. Ross reported a similar case and raised the question of the loose body gravitating to the spot and becoming pressed into the septum.

Ray and Coughlin demonstrated involvement of the articular surface of the talus in fourteen cases.

There is an explanation for the susceptibility of these areas to trauma and the possibility of the separation of a loose body. In the embryo, permanent compact bone is laid down by the perichondrium and subperiosteally. This cortical bone plays a prominent part in the healing reaction after injury. The cancellous bone of the epiphysis is meagerly supplied by the nutrient vessel in long bones. The major vascular supply being from vessels anastomosing around the joint, sending branches into the periosteum and thence into the haversian systems of the epiphyseal region. Lexer demonstrated that these vessels pursue a periosteal and transcortical route with an apparent deficiency of blood supply in the lateral surface of the medial femoral condyle. It is not unreasonable to assume, therefore, that the sites of osteochondritis dissecans are not mere chance, but represent areas with a relative vascular deficiency in which non-union may be more apt to occur.

Osteochondritis Dissecans.—On exposing a joint affected by osteochondritis dissecans, the earliest gross pathological change noted is a faint whitish line of demarcation in the cartilage. It is seen most commonly and characteristically on the anterolateral surface of the medial condyle of the femur (Table I, Cases 1 and 2). On incising the cartilage, the underlying bone may be found separated from its base in whole or in part. Fibrous tissue lines the defect. As the process develops, the overlying cartilage may be fissured or split. After separation of the subchondral bone from its base, degenerative and regenerative changes occur,

OSTEOCHONDRITIS DISSECANS—SWENSON

whether lying in its bony bed or free within the joint (Table I, Cases 3 and 4). Degenerative changes may be slight during the period of attachment. Proliferative changes consist mainly

period of time undergo a slow type of necrosis and a change to fibrocartilaginous bodies. On section, little of the original structure may present itself. A final stage in untreated osteochondritis disse-

TABLE I. OSTEOCHONDRITIS DISSECANS

Case	Roentgen Findings	Nature of Body at Surgery	Pathologic Findings
1.	Defect in anterolateral surface, medial condyle, left.	Retained	Articular cartilage and cancellous bone.
2.	Defect in anterolateral surface, medial condyle, right.	Retained	Articular cartilage and cancellous bone.
3.	Defect in anterolateral surface, medial condyle, right. Crescentic density above patella.	Loose	Articular cartilage and cancellous bone, "slow necrosis".
4.	Defect in anterolateral surface, medial condyle, left. Three bodies, calcium density.	Loose	Articular cartilage and cancellous bone, "slow necrosis."
5.	Defect in anterolateral surface, medial condyle, right. Body of calcium density medial to patella.	Absorbed two months later.	Defect in medial condyle lined with fibrous tissue.
6.	Ununited fracture (?), tip, lateral malleolus, right.	Loose	Articular cartilage and cancellous bone.
7.	Mottling of capitellum, right, in 1940. Osteoarthritic changes and loose bodies, 1947.		

TABLE II. OSTEOCHONDROMATOSIS

Case	Roentgen Findings	Nature of Body at Surgery	Pathologic Findings
8.	Defect in anterolateral surface, medial condyle, left.	Synovial chondrification	Fibrous tissue, cartilage, and osteoid tissue. Defect in condyle lined with fibrous tissue.
9.	Three large areas of mottled density, right knee joint.	Loose	Fibrous tissue, cartilage, and osteoid tissue.
	Three areas of mottled density, left knee joint.	Loose	Fibrous tissue, cartilage and osteoid tissue.
	Bilateral fabella.		
10.	Multiple faceted opacities of mottled density, left hip joint.	Loose and attached	Fibrous tissue, cartilage, osteoid tissue. Attached bodies showed vascular marrow spaces in the osteoid tissue.

in covering the surface of separation with fibrous tissue, which may become fibrocartilaginous in part, with a thin outer layer of fibrous tissue resembling perichondrium.

The loose body may be retained in the defect for a time by bands of tissue. Eventually these give way, permitting the loose body to migrate into the joint. The body may cause locking and further damage to the articular surfaces by impingement, or may become attached to the synovial membrane in a recess of the joint. As a result of attachment, the fragment may be absorbed (Table I, Case 5), or revascularization may occur with possible growth. There may be a transition to osteochondromatosis.

Bodies that have been loose for a considerable

cans is osteoarthritis which may progress to ankylosis. This is particularly a sequel to cases involving the elbow (Table I, Case 7).

Synovial changes are minimal in the retained phase. In the sequestered phase, due to irritation, there may be patches of hyperplasia and corresponding increase in synovial fluid. In the attached phase, there is localized hyperemia and hyperplasia. This may be the only finding in case of absorption, or the synovial membrane may have returned to a more normal state. The findings in the phase of osteoarthritis are those of synovial adhesions, patches of hyperplasia and hyperemia, depending on the degree of irritation.

Primary changes in the articular surfaces, other

OSTEOCHONDRITIS DISSECANS—SWENSON

than the defect, depend on locking and impingement.

Microscopic changes parallel the gross findings. In the retained phase, the cartilage and bone cells

future skeleton. Its derivatives may retain the power of cartilage formation throughout life.

As a result of repeated traumatic irritation, hyperplasia of the synovial membrane may occur.

TABLE III. OSTEOCHONDRITIS DISSECANS

No.	Hosp. Case No.	Age Sex	Joint	Duration of Complaints	Chief Complaints	History of Trauma	Management
1.	74794	19 M	Left knee	1 year	Soreness	Yes	Surgical
2.	77903	16 M	Right knee	4 years	Soreness	Yes	Surgical
3.	85679	26 M	Right knee	4 years	Locking, aching	Yes	Surgical
4.	83511	48 M	Left knee	25 years 1 year	Aching, locking	Yes	Surgical
5.	77653	20 M	Right knee	6 months 2 months	Soreness, locking	Indefinite	Surgical
6.	82232	21 F	Right ankle	8 months	Soreness, swelling	Yes	Surgical
7.		18 M	Right elbow	5 years prior to initial visit	Soreness, stiffness	Yes	Consultation only

Average age: 24 years. Average age at onset: 18 years.

TABLE IV. OSTEOCHONDROMATOSIS

No.	Hosp. Case No.	Age Sex	Joint	Duration of Complaints	Chief Complaints	History of Trauma	Management
8.	79509	17 M	Left knee	1 year	Swelling, soreness	Yes	Surgical
9.	65242	46 M	Both knees	12 years	Locking, soreness, swelling	Yes	Surgical
10.	71229	26 M	Left hip	8 years	Locking, soreness, swelling	Yes	Surgical

Average age: 29 years. Average age at onset: 22 years.

are viable. Patches of calcification may be found in the cartilage. The marrow spaces of the underlying bone may be filled with acellular connective tissue. Proliferation of fibrous tissue occurs along the zone of demarcation. Peripheral areas immediately following separation of the body, appear ragged and moth-eaten. A body free in the joint, deprived of all vascular supply, undergoes a slow type of necrosis. No inflammatory reaction is noted. Vascular changes were not found in any of the sections studied. Multiple foci of calcification are often present.

Osteochondromatosis.—It is to be remembered that bones and joints begin their differentiation from a single type of mesenchyme. This tissue is represented in the precartilaginous state of the

Metaplasia may then supervene as an individual reaction. Minute beads of cartilage are formed in the tips of relatively undifferentiated connective tissue of the villous synovial membrane. Formation of osteoid and eventually osseous tissue in the cartilage may occur in due course of time (Table II, Cases 8, 9, and 10).

There may be changes suggestive of the coexistence of osteochondritis dissecans and osteochondromatosis (Table II, Case 8). Liebman and Iseman, and Geschickter have suggested that loose bodies may become attached to the synovial membrane and proliferate similarly to osteochondromatosis.

On exposing a joint affected by this condition, the synovia is somewhat increased in amount and viscosity. The underlying synovial membrane is



Fig. 1. Defect in the anterolateral surface of the medial condyle, consisting of an area of increased density bordered by a narrow zone of decreased density.



Fig. 2. Crescentic patch of increased density lies in the suprapatellar space. The defect in the medial condyle is seen as a slight irregularity in the surface.

hyperplastic. Patches of hyperemia are usually present. There may be papillary osseocartilaginous or cartilaginous projections with fibrous pedicles. Free bodies may present themselves. These vary in size from tiny pearl-like structures to large masses of dull whitish hue, 6 or 7 centimeters in diameter. Unopposed surfaces, particularly in bodies attached by a pedicle to the underlying membrane, may even assume a mulberry or cauliflower-like appearance.

The articular surfaces of the joints involved, while basically normal, bear the imprint of loose bodies which have been caught and "locked." In consequence, there may be areas of chondromalacia and exfoliation, with resultant defects in the articular cartilage. Occasionally an excrescence of an osseocartilaginous nature is found at the juncture of bone and cartilage (the synovial margin).

Microscopic sections reveal an outer layer of connective tissue cells, perhaps the remnant of the stratum synoviale. Beneath this is a fibrous tissue layer, encapsulating fibrocartilage and cartilage. Areas or even layers of calcification may be found,

or the interior may contain osteoid or osseous tissue. There is a marked tendency to the development of osseous tissue even in the tiny cartilaginous papillae on the synovial membrane. Thus there is a characteristic transition from without in: fibrous tissue to cartilage to bone. The bone may be differentiated into cortical and cancellous bone. Marrow spaces may be present. In attached bodies these may be filled with numerous small blood vessels, fibroblasts, fatty tissue, and blood elements. More commonly, the lamellae of bone which form are free of haversian canals and marrow. The cartilage in free bodies is nourished by the synovia, whereas the osseous portion may become necrotic. Free bodies may receive sufficient nourishment to increase in size. Phemister once said that this condition afforded the best example of tissue culture *in vivo* that he was acquainted with.

Symptomatology

A clinical history in both entities will elicit a story of episodes of aching or soreness about the joint. Trauma may or may not be alluded to as the instigator of the symptoms.



Fig. 3. An oblique view to demonstrate irregularity of contour of the capitellum and mottling of the subchondral bone. There is a loose body present in the interosseous space just distal to the radial head.

With sequestration of a body or detachment of an osteochondromatous body, the "mouse" may be discovered by the patient on palpating the parapatellar bursae in knee involvement. Locking occurs in the presence of a free body, and the patient is unable to fully flex or extend the joint. A particular maneuver may free the body, allowing free range of motion. Little or no change about the joint may be described by the patient. This is more characteristic of osteochondritis dissecans than of osteochondromatosis.

The symptoms of osteochondromatosis are those of a mildly sore joint with episodes of aching and swelling of the joint. Bogginess may occur. Locking may be complained of, and the patient may have discovered one or more loose bodies on palpation. A grinding or velvety crepitation on motion may be described and can be verified by palpation of the joint during active motion. Muscular atrophy of slight degree may be masked by the joint swelling. Moderate atrophy has been reported.

Roentgen Findings

The clinical diagnosis or suspicion of the existence of either of the two conditions must be verified by roentgen examination.



Fig. 4. Cartilage-covered osseous body at the tip of the lateral malleolus, impinging on the joint between the talus and calcaneus.

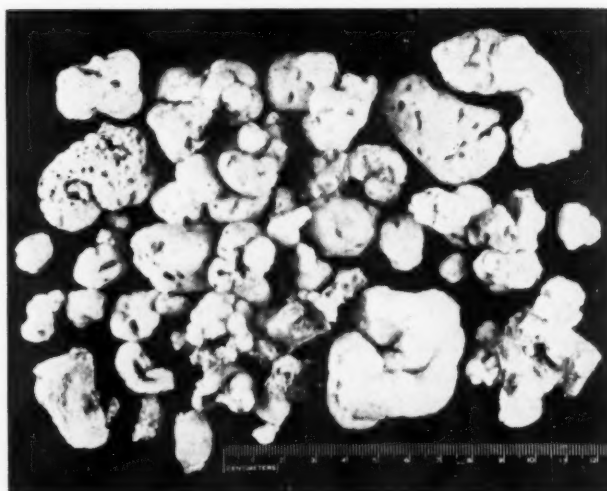


Fig. 5. Fifty osseocartilaginous bodies removed from the left hip joint (Case 10). The size varied from 0.5 cm. to 7.0 cm. in diameter.

Osteochondritis Dissecans.—In the anteroposterior projection one sees in the early or retained stage a defect in the articular surface. This consists of an area of increased density bordered by a zone of decreased density resembling a ring lying on contrasting material (Fig. 1). With progression of the disease, the shadow of increased density will appear to be lying in the joint space as if displaced out from the articular surface. With complete separation of the body, the defect remains as a landmark even though its outlines may



Fig. 6. Two large oval bodies of a mottled calcium density are noted in the suprapatellar space and one in the intercondyloid fossa of the right knee joint. Note the fabella which was bilateral in occurrence (Case 9).

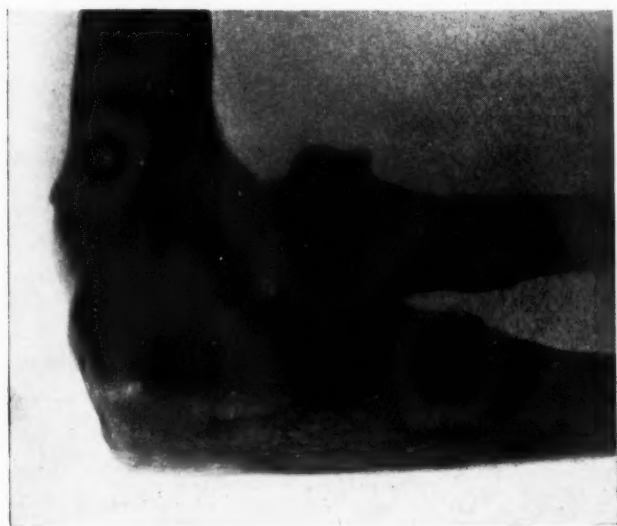


Fig. 8. Lateral roentgenogram shows diminution in the joint space and irregularity of the articular surfaces, indicative of osteoarthritis of the elbow joint.

soften and blend into its background with the passage of time (Fig. 2). The loose body may then be visualized, if present, in any portion of the joint, usually seeking a pocket in the synovial



Fig. 7. Multiple loose and attached bodies of mottled calcium density in the left hip joint.

membrane. It may become fragmented and visualized as several small bodies.

In the knee joint, a defect in the anterolateral surface of the medial condyle is characteristic. In the hip joint, the typical location is on the superolateral aspect of the articular cartilage of the femoral head above the round ligament. The osteochondritic focus is denser than the underlying femoral head and rests directly upon it. In the elbow joint (Fig. 3), the capitellum is most frequently involved. In the ankle joint (Fig. 4), visualization of both loose body and articular defect may be difficult. Mensor reports the use of tomography in picking up these defects. Oblique studies, in addition to routine anteroposterior and lateral views, throw into relief any defects in the talus.

Osteochondromatosis.—Roentgenograms reveal circumscribed bodies of variable density in the joint area. These may vary in size from minute points to areas five to seven centimeters in diameter (Fig. 5). These may be few in number (Fig. 6) or many (Fig. 7). They are not attached to the underlying bone, but lie within the joint or in the soft tissue adjacent. Bodies have been seen outside the joint space suggesting extrusion. The point of origin of these bodies is not detected as an articular defect. Usually the bodies are much more numerous and, at times, more mottled than the shadow seen in osteochondritis dissecans.

Treatment

In both conditions, surgical intervention is the treatment of choice. There have been cases of osteochondritis dissecans responding to conservative treatment (immobilization). Strange's case, a child of four years, resolved after three and one-half months of immobilization in plaster-of-Paris cast. Contrarily, the process has progressed in several other instances treated by immobilization.

Arthritic changes have occurred with non-operative care (Figs. 3 and 8). In the cases operated upon at this hospital, no recurrence or permanent disability has occurred. We know that immobilization for two or more years may be necessary to secure healing of a Legge's disease. It is possible that osteochondritis dissecans of the hip and knee in the retained phase might respond to adequate immobilization; however, economic factors necessitate a more immediate result. Surgical intervention offers a rapid relief of the condition and an early return of the individual to a productive capacity. It has often been demonstrated that progressive arthritic changes, secondary to the condition, are obviated by early surgical removal of the process.

Conservatism plays little part in the treatment of osteochondromatosis, as surgical removal is the only means of curing the condition. It is noteworthy that no effort is made to dig out loose bodies that have been extruded into the adjacent soft tissues from the joint unless they interfere with function or cause pressure on nerves or vessels. A partial synovectomy is usually indicated when the synovia shows definite changes. Case 9 from this hospital, with bilateral osteochondromatosis of the knee joint, has been followed for seven years with no complaints referable to the knees, or no recurrence of the condition.

Summary

Two relatively uncommon clinical entities, osteochondritis dissecans and osteochondromatosis have been discussed. Both conditions produce free bodies within a joint. Theories of etiology, laboratory studies, experimental work and clinical observations have been reviewed and correlated with the findings in our own cases.

The consensus points to trauma playing a definite role in producing noninfectious sequestration of subchondral bone from an articular surface with a deficient nerve and vascular supply in the case

of osteochondritis dissecans. Trauma is apparently a predisposing factor in initiating the metaplastic process of synovial chondrification resulting in osteochondromatosis.

Careful roentgen studies are mandatory for exact diagnosis.

A careful review of the literature and a critical analysis of ten cases managed at this hospital point to the fact that surgical removal of the free bodies within a joint offers the more satisfactory method of treatment.

References

1. Albee, F. H.: Sixty-four joint mice in the shoulder. *J. Bone & Joint Surg.*, 9:601-603, 1927.
2. Arey, L. B.: *Developmental Anatomy*. Ed. 4. Philadelphia: W. B. Saunders and Co., 1941.
3. Axhausen, G.: Ueber einfache aseptische Knochen und Korpelnkrose, Chondritis dissecans und Arthritis deformans. *Arch. f. klin. Chir.*, 99:519, 1912.
4. Bennett, G. E.: Shoulder and elbow lesions of the professional baseball pitcher. *J.A.M.A.*, 117:510-514, 1941.
5. Berkheiser, E. J.: Osteochondritis of the knee in aged patients. *S. Clin. North America*, 26:97-102, 1940.
6. Boehm, F.: Synoviale Osteochondromatosis und Trauma. *Deutsche Ztschr. f. Chir.*, 212:275, 1928.
7. Boyd, W.: *Surgical Pathology*. Ed. 5. Philadelphia: W. B. Saunders and Co., 1943.
8. Brackett, E. G., and Hall, C. L.: Osteochondritis dissecans. *Am. J. Orthopedic Surg.*, 15:79-94, 1917.
9. Brickey, Paul A., and Grow, J. B.: Osteochondritis dissecans. *Am. J. Surg.*, 48:463-466, 1940.
10. Campbell, W. C.: *Operative Orthopedics*. St. Louis: C. V. Mosby Co., 1939.
11. Campbell, W. C., and Smith, H.: Injuries and surgical diseases of joints. *Lewis: Practice of Surgery*, 2:144-152, 1944.
12. Colonna, Paul C.: Osteochondromatosis of the knee joint. *Surg., Gynec. & Obst.*, 53:698, 1931.
13. Conway, F. M.: Osteochondritis dissecans. *Am. J. Surg.*, 38:691-699, (Dec.) 1937.
14. Crisler, W. E., and Morton, H. S.: Osteochondritis dissecans of the supratrochlear septum of the humerus. *Am. J. of Roentgenol.*, 54:41-46, 1945.
15. Dawson, C. W.: Osteochondritis dissecans. *Arch. Surg.*, 46:635-638, 1943.
16. Freiberg, A. H.: Osteochondritis dissecans. *J. Bone & Joint Surg.*, 5:3-16, 1923.
17. Freund, E.: Chondromatosis of the joints. *Arch. Surg.*, 34:670-687, 1937.
18. Freund, E.: Osteochondritis dissecans of head of femur. *Arch. Surg.*, 38:691-699, 1937.
19. Henderson, M. S.: Osteochondromatosis of the knee joint. *Am. J. Orthopedic Surg.*, 15:351-356, 1917.
20. Henderson, M. S., and Jones, H. T.: Loose bodies in joints and bursae due to synovial osteochondromatosis. *J. Bone & Joint Surg.*, 5:400-423, 1923.
21. Geschickter, C. F.: Fibrocartilaginous tumors of the bone. *Arch. Surg.*, 23:215-328, 1931.
22. Geschickter, C. F., and Copeland, M. M.: Tumors of bone. *Am. J. Cancer*, 1936.
23. Jones, H. T.: Loose body formation in synovial osteochondromatosis. *J. Bone & Joint Surg.*, 6:407-457, 1924.
24. Jones, H. T.: The histogenesis of cartilage as shown in chondromatosis of the knee joint. *J. Bone & Joint Surg.*, 9:310-315, 1927.
25. Jones and Lovett, R. W.: *Orthopedic Surgery*. New York: William Wood and Co., 1923.
26. Jalet, J.: Osteochondromatosis or chronic arthritis of the hip. *Bull. et mém. Soc. de radiol. méd. de France*, 25:442-444, 1937.
27. Kappis, M.: Osteochondritis dissecans und traumatische Gelenkmause. *Deutsche Ztschr. f. Chir.*, 157:187, 1920.
28. Kilfooy, E. J.: Osteochondritis dissecans of the left elbow. *Am. J. Surg.*, 53:496-499, 1941.
29. King, D., and Richards, V.: Osteochondritis dissecans of the hip. *J. Bone & Joint Surg.*, 22:327-348, 1940.
30. Lewis, W. H.: *Gray's Anatomy*, Ed. 24. Philadelphia: Leo and Febiger, 1944.
31. Lexer, E.: Die Entstehung entzündlicher Knochenherde. *Arch. f. klin. Chir.*, 71:1, 1903.
32. Lieberman, C., and Iseman, R. N.: Osteochondritis dissecans. *Am. J. Roentgenol.*, 43:865-870, 1940.
33. Macey, H. B.: Loose body adjacent to psoas tendon. *Proc. Staff. Meet. Mayo Clin.*, 9:366-368, 1934.
34. Mensor, M. C., and Melody, G. F.: Osteochondritis dissecans of the ankle joint. *J. Bone & Joint Surg.*, 23:903-909, 1941.
35. Outland, T. A.: Osteochondritis dissecans, relationship to trauma. *Am. J. Surg.*, 31:165-166, 1936.

(Continued on Page 812)

Benign Pulmonary Histoplasmosis

Familial Incidence

By Russell F. Weyher, M.D.

Detroit, Michigan



HISTOPLASMOSIS, OR reticulo-endothelial cytomycosis, was first clearly described by Darling⁴ in 1906 as a protozoan infection producing pseudo-tubercles in the lungs and focal necrosis in the liver, spleen, and lymph nodes. In 1913, Da Rocha Lima⁵ concluded the organism was a fungus. Hausmann and Schenken⁷ described a unique infection with a yeast-like organism in 1933. Amolsch and Wax¹ in 1939 described fatal histoplasmosis in an infant with otitis. In 1943, Parsons and Zarafonitis¹² reported the autopsy findings in a twenty-year-old colored male, and in 1945 reviewed seventy-eight cases then in the literature.

In the same year, Morgan¹⁰ summarized the then known facts about the disease.

Recently, workers in the public health field, such as Palmer,¹¹ Emmons et al.,⁶ Christie, and Peterson³ have made extensive surveys of large segments of the population who have pulmonary calcifications with negative tuberculin tests, and who are in apparently good health. Since tests with a diluted extract of histoplasmin show varying degrees of sensitivity, it is considered that these people have been infected with histoplasmosis and have recovered.

Etiology

Histoplasmosis has been defined as a generally fatal systemic disease of the reticulo-endothelial system, produced by minute round, oval, or crescent-shaped fungi with a thick highly refractive capsule. Apparently in man the organism, *Histoplasma capsulatum*, is found as separate yeast-like cells, but when cultured, mycelial threads and budding occur.⁹

Presented at the medical staff conference of Providence Hospital, February 18, 1947.

Epidemiology

It has been found throughout the world except in the frigid zones.¹⁰ The incidence is higher in young children and in those past fifty years. It is three times as common in males as in females according to Morgan.¹⁰

Monkeys can be successfully inoculated, and dogs may harbor the organism.⁹

Benign pulmonary calcifications, considered due to histoplasmosis, have been found in many people living near or on the Western Appalachian plateau and in states bordering the Mississippi river slopes.³ The cases which are to be described later have resided in Salinas, Tennessee.

Symptomatology

In children, diarrhea, abdominal discomfort, irritative or ulcerative lesions of the skin, enlarged peripheral lymph nodes, chronic cough, low grade fever, and weight loss may occur.

Symptoms of the so-called benign cases have rarely been described in the literature.

Morgan¹⁰ divides infected patients into five groups:

1. A pulmonary type with cough and symptoms of a cold, occasionally associated with tuberculosis, and showing massive infiltrations with areas of focal necrosis, and multiple foci resembling tubercles, in the lungs.
2. Generalized or regional lymph node involvement.
3. Ulcers of the mucous membranes and skin.
4. Fever, lassitude, hepatomegaly, splenomegaly, anemia and leukopenia.
5. A protean type with arthritis, sore throat, hoarseness, or gastrointestinal symptoms.

Differential Diagnosis

It has been confused with tuberculosis, kala azar, noma, aleukemic leukemia, influenza and virus pneumonia.

The lesions, in chest x-rays of the pulmonary cases, may simulate miliary tubercles.

Prognosis

Ziegler and many other workers repeatedly state that it is highly lethal, but many cases in the Appalachian mountains and in the Tennessee Valley, with pulmonary calcifications, positive histoplasmin tests and negative tuberculin reactions, are now believed to be benign infections.



Fig. 1. Chest x-ray of Mr. R. S. was considered normal except for two discrete calcified nodes in the base of the left lung.

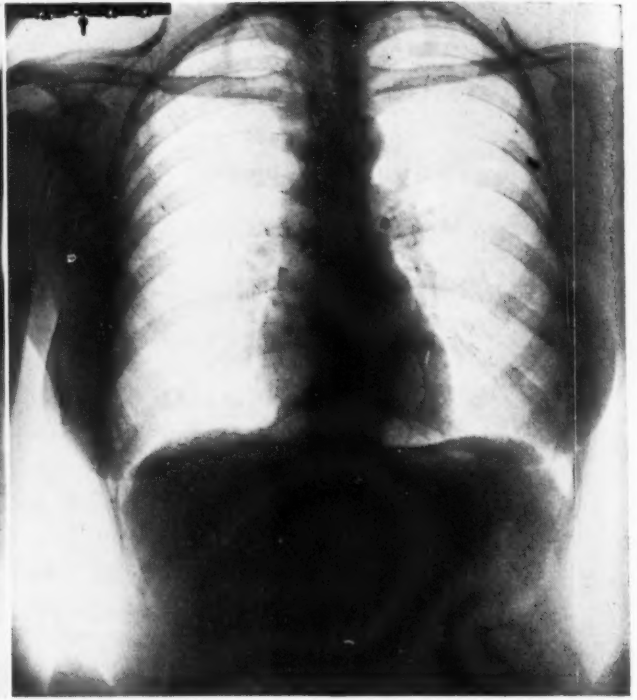


Fig. 2. Chest x-ray of Mrs. L. S. showed many calcified hilar glands.

Family Case Study

The S. family consists of the father, Roy; mother, Lillian, and three daughters: Helen, aged sixteen; Anna, aged fifteen; and Betty Jean, aged thirteen years. The parents were residents of Tennessee until 1928 when they came to Detroit.

Mr. Roy S., aged forty-four, had no complaints when first examined in 1944. He had had hay fever for the past year (1944) which started in July and stopped when a frost came. On October 14, 1944, an x-ray of his chest (Fig. 1) was considered normal except for two small discrete calcified nodes in the base of the left lung.

On November 5, 1945, he stated that he had been in the Cumberland Valley in Tennessee for two weeks during the previous July. His histoplasmin test showed a very slight reaction (0.5 cm. in diameter) with no induration or itching. An x-ray of his chest on February 2, 1947, showed no changes.

Mrs. Lillian S., aged thirty-six, on December 18, 1944, complained of a hacking cough for three months with a low grade fever, and felt very tired. An x-ray of her chest (Fig. 2) revealed many healed calcified dense hilar glands. A few discrete ovoid lesions were seen in the right infraclavicular region.

Her blood count on December 28, 1944, revealed the following: hemoglobin, 87 per cent, 14.5 gm.; red blood cells, 4,760,000; white blood cells, 12,000; neutrophils, 64 per cent; small lymphocytes, 34 per cent; eosinophiles, 2 per cent. Her temperature on that date was 99.2°. About a fortnight later, on January 2, 1945, her cough was gone and she was feeling well. Clinical examination

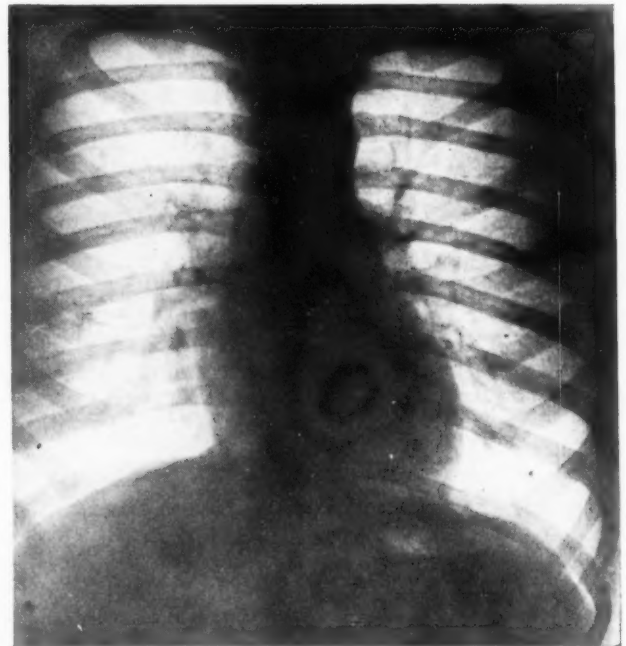


Fig. 3. Chest x-ray of Anna S. showed calcified masses in the right lung and some tiny doughnut-like areas near the right cardiac border.

at that time was negative, including a normal temperature.

On November 5, 1946, she stated that she had been in the Cumberland Valley in Tennessee for two weeks in July of 1945. A histoplasmin test done at that time showed a very slight reaction (.8 cm.) with no edema or induration.

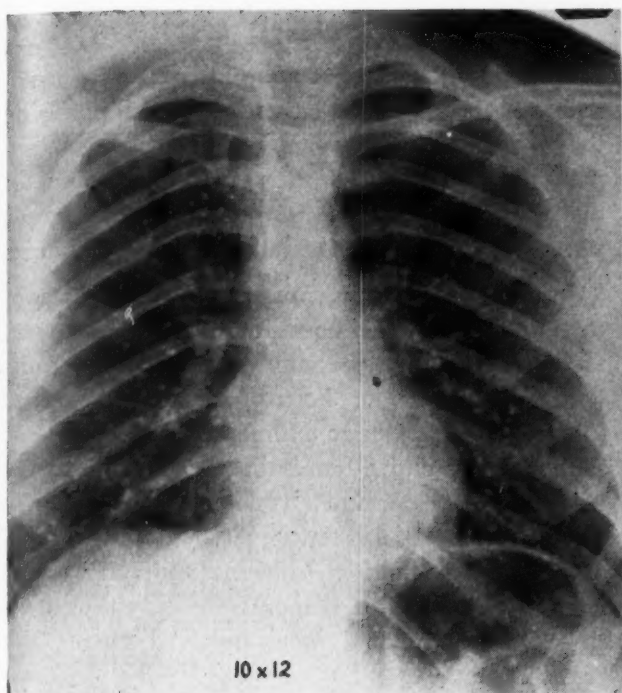


Fig. 4. Chest x-ray of Betty Jean S. in September, 1944, showed multiple fine discrete areas of increased density in both lung fields.

Helen S., aged sixteen, had no complaints in October, 1944. Her lung fields, hilar areas, heart, and diaphragm were all considered normal in a chest x-ray. Clinically she appeared in good health.

She had had pyelitis in 1943, and again in 1939, at the same time as her sister, and a tonsillectomy in 1940 which was followed by postoperative hemorrhages for about two weeks.

On November 6, 1946, she stated that she had been in the Cumberland Valley for two weeks in August, 1946, and also during the entire summer in 1945. The histoplasmin test revealed some tenderness and itching and a raised area of erythema about 2 by 4 cm. in size.

Chest x-ray studies on December 5, 1946, revealed no changes in the lung fields nor hilar areas.

Anna S., aged fifteen, was in Tennessee all summer during 1945, and also in 1946. At that time she had a cough for more than four weeks but had no hemoptysis. Her histoplasmin test showed a strongly positive reaction 1 by 2.5 cm. in size, and was indurated and painful.

An x-ray of her chest (Fig. 3) on November 5, 1946, showed the heart, trachea, and left lung to be clear. In the mid-portion of the right chest in Zone 2, there was a dense irregular mass of calcareous tissue; and multiple masses of partly calcified material were seen in the lower hilum. The parenchyma was not involved. Just lateral to the right cardiac border some small spherical lesions with lighter central cores had the appearance of tiny buttons, crescents, or doughnuts.

Another x-ray study of her chest on January 20, 1947, revealed very little change. Some sharpening of the outlines of the lesions in the right mid-chest was observed, and some lesions appeared slightly smaller.

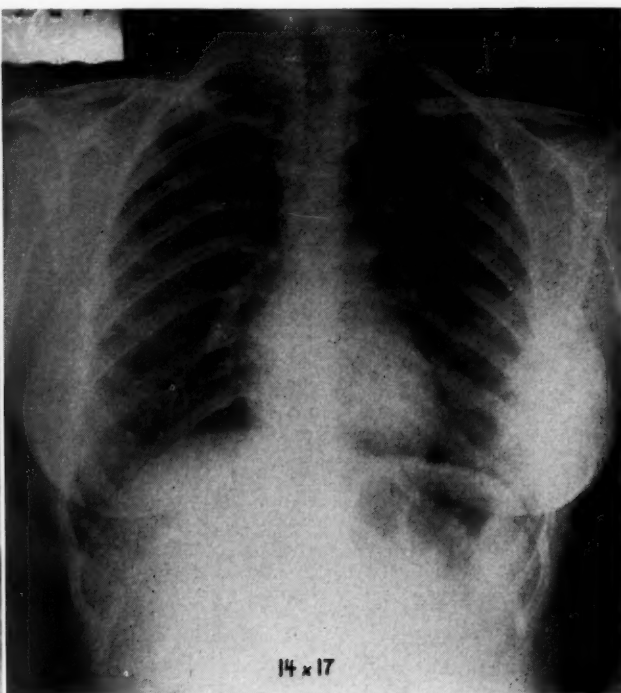


Fig. 5. X-ray of Betty Jean S. in January, 1947, showed an unchanged pattern of pulmonary calcifications.

Betty Jean S., aged thirteen, stated that she had lived in Tennessee (Salinas) during July and August of 1940. Many of her playmates had a periodic cough all that summer. During that time she had a fever of 100° to 101°, her eyes were red, her nose ran, and she had a loose constant cough, but never hemoptysis. Both sisters and her mother were with her at that time.

She had had pyelocystitis in 1938 and in 1939. She had never had hay fever, to her knowledge.

In September, 1944, she felt ill for about a week. This was followed by a cough lasting for over three weeks. On September 23, 1944, a chest roentgenogram (Fig. 4) revealed multiple fine discrete areas of increased density scattered throughout both lung fields. Clinical examination of the chest was negative.

On November 6, 1946, her height was 5 feet 1 inch, weight 106 pounds. The histoplasmin test revealed tenderness, and an indurated area 2.5 cm. in diameter, and was considered strongly positive. An x-ray of the chest on November 2, 1946, showed the miliary lesions throughout both lungs to be generally more sharply outlined and more dense. Some of the individual areas were smaller in size, but none had disappeared, as was shown by superimposing the more recent film over the original x-ray. Her blood count on that day revealed the following: hemoglobin, 78 per cent, 11 gm.; red blood cells, 3,580,000; white blood cells, 7,800; neutrophils, 54 per cent; small lymphocytes, 37 per cent; eosinophiles, 4 per cent; and some anisocytosis of the erythrocytes.

On February 1, 1947, her blood smear was examined by Dr. E. L. Heller of Pittsburgh, who stated that her hemoglobin was 85 per cent, red blood cells 4,210,000, and white blood cells, 7,200. The smear showed an

average of 3 eosinophiles per high power field. He stated, "There is no characteristic blood picture in this disease."⁸

At this time, an x-ray of the chest (Fig. 5) revealed the same pattern of pulmonary calcifications as that observed in November, 1946.

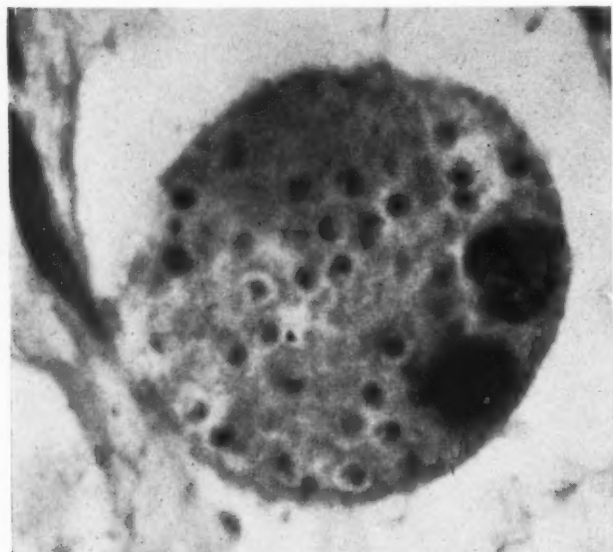


Fig. 6. Histoplasma (yeast-like phase) within a phagocyte from a lymph node. H. and E. stain, magnification $\times 1800$. Courtesy of Dr. S. E. Gould.

NOTE: The histoplasmin for the tests was kindly furnished by Dr. Amos Christie who also reviewed the series of chest roentgenograms. One-tenth of one c.c. of a dilution of 1 to 100 was injected intracutaneously and was read after seventy-two hours in all of the cases. The decreased sensitivity of both parents to the histoplasmin agrees with Christie's findings that people past the age of twenty years seem to lose their sensitivity.² Von Pirquet and Mantoux tuberculin tests on the entire family in October and November of 1946 were negative.

Discussion

This family has been in the habit of vacationing during the summer months in Tennessee. During the summer of 1944, the children vacationed in the city of Salinas where two of them became ill, with malaise and a persistent cough. One child showed a protracted low grade fever, weight loss, a leukopenia and an hypochromic anemia of mild degree.

Serial x-ray studies of their chests showed multiple discrete crescent-shaped or button-shaped areas scattered throughout the lung fields and hilar areas. The appearance of many of the lesions was caused by an outer spherical zone of increased density surrounding a central less dense core.

Comparison of the appearance of these lesions shows a curious similarity to the appearance of the individual histoplasma organism as shown in the photomicrograph in Figure 6.^{12a}

Summary

A review of the recent literature on histoplasmosis has been presented. Recent studies emphasizing the evidence for a benign pulmonary form, apparently widespread throughout some sections of the United States, are contrasted with the grave prognosis usually described in the earlier literature.

In the case reports presented, the parents of three children were born in Salinas, Tennessee, and all members of the family have lived intermittently in that region. Four of the group are considered cases of benign pulmonary histoplasmosis. Although the entire family has been observed for nearly three years, and all members are clinically well at the time of this report, serial roentgenograms of two of the children, showing widespread pulmonary calcifications, demonstrate increasing density of the individual areas involved during the period of study.

The reactions to histoplasmin in this family and the reproduction of the *Histoplasma capsulatum* are not to be construed as proof of the etiology of the calcifications in the chest roentgenograms, since histoplasmin tests are not specific for this organism alone.

However, clinically the cases appear to fit descriptions of the benign form of this disease.

Conclusions

Since no effective therapy exists for this disease, it is suggested that persons with so-called benign cases, of the pulmonary form, at least, who move away from the areas in which they contracted the infection, should avoid returning to the same regions for any protracted stay, especially during the summer months, since apparently reinfection may occur.

2415 West Grand Boulevard.

References

1. Amolsh, A. L., and Wax, J. H.: Histoplasmosis in infancy; report of a case. *Amer. J. Path.*, 15:477-487, 1939.
2. Christie, Amos: Personal communication to the author, (Nov. 25) 1946.
3. Christie, A., and Peterson, C. J.: Pulmonary calcification, et cetera. *Am. J. Public Health*, 35:1131-1147, (Nov.) 1945.
4. Darling, S. T.: A protozoan general infection, *Histoplasma capsulatum*. *J.A.M.A.*, 46:1283-1285, (April 28) 1906.
5. Da Rocha Lima, H.: Beitrag zur Kenntnis der Blastomykosen: Lymphangitis epizootica und Histoplasmosis. *Centralbl. f. Bakt.*, (Abt. 1), 67:233, 1913.
6. Emmons, C. W.; Olson, B., and Eldridge, W. W.: Studies in the role of fungi, et cetera. *Pub. Health Rep.*, 60:1383-1394, (Nov. 23) 1945.

(Continued on Page 754)

Aims and Purposes of the Specialty Boards

Special Reference to the American Board of Surgery

By J. Stewart Rodman, M.D.
Philadelphia, Pennsylvania

IT MUST BE admitted that graduate medical education is only now beginning to emerge from the same chaotic state that undergraduate medical education found itself in thirty years ago. The great advances in medicine have made it necessary to admit that no one can possibly be adequately trained to practice safely in more than one of its main divisions. In recognizing this need, however, it must be remembered that today, as in the past, the greatest need is for the large majority of those who graduate in medicine to practice internal medicine or the general practice of medicine, whichever one chooses to call it. For those who wish to practice in a special field of medicine, an organized plan of training must be followed and the results of that training shown to be adequate.

This, in a broad sense, is the whole idea underlying the creation of the specialty examining boards. It is not the purpose of these boards to encourage more than are needed to enter into such specialty fields. Rather the definite purpose should be, and I believe is, to keep down the numbers of those wishing to enter a specialty field to those best fitted to do so. It is realized that in a democracy there should be as much latitude as possible in methods of arriving at a goal, but it should also be realized that a doctor's first obligation is to practice safe medicine and that this obligation is a higher one than his inherent right to go his own way in arriving at his goal. If this is admitted, it must mean that those who have successfully practiced either internal medicine or a specialty must formulate plans for the training of those to follow in their footsteps.

The specialty boards, graduate courses in medical universities, refresher courses in the various specialties, scientific societies, all have this common purpose. Medicine has passed the point where the only requirements for one to practice internal

medicine or any of its specialty fields are graduation from a medical school and the individual's own announcement that he is a specialist. I know of no learned profession which has tried so hard to clean its own house and to meet the ever-changing public needs. It is certainly much more desirable that as members of the medical profession we assume this responsibility, rather than to wait for the government to step in and force it by law.

In discussing the subject of "Specialty Boards, Their Aims and Purposes," I wish it understood that I am not officially authorized to plead this cause. As medical secretary of the National Board since its organization in 1915, as chairman of the Organization Committee of the Advisory Board to the Medical Specialties, and as secretary of the American Board of Surgery for the past eleven years, I have spent a good part of my professional life helping in the attempt to set up reasonable standards for undergraduate and graduate training.

In order that we may better understand the specialty board problems it will be well to begin with the Advisory Board to all of the Medical Specialties, the reasons underlying its organization, its aims and purposes. This Advisory Board was organized in 1933-1934 to co-ordinate graduate education and certification of medical specialties in United States and Canada.

Several specialty boards had been functioning actively and successfully for a number of years prior to the organization of the Advisory Board for Medical Specialties. Their purposes were, primarily, to establish minimum standards of graduate educational and training requirements for physicians representing themselves to the public as being specialists, with certification of candidates by the boards after they had been able to pass the boards' examinations successfully. Secondly, these boards hoped to improve the general standards of graduate medical education and facilities for special training. This aim is being steadily and rapidly accomplished.

The American Board of Ophthalmology was the first special certifying board to be created, in 1916. The American Board of Otolaryngology, established in 1924, was followed by the American Board of Obstetrics and Gynecology in 1930 and the American Board of Dermatology and Syphilology in 1932.

During part of this period of time, plans for the organization of similar boards in other specialties were being actively projected, all of these

Presented at the National Conference on Medical Service, Chicago, Illinois, February 8, 1948.

groups being desirous of availing themselves of the experiences of the already existing boards.

It was soon recognized that some formal and official plan of organization must be established. It was clearly essential that an examining board must have the official sanction of the national societies in its given specialty, as well as that of its related section of the American Medical Association, but there was, at that time, nothing to prevent unofficial groups from organizing examining boards and using the title, "American Board."

Consequently, in order to avoid duplication of effort, as well as to co-ordinate the work of the several boards and other interested groups into a concise and homogeneous plan for betterment, it was deemed advisable to create an Advisory Board which should give consideration to those problems common to all, and which should be representative of each organization concerned.

During the years 1933 and 1934, this Advisory Board was organized and began actively to function. Simultaneously at the Milwaukee session of the American Medical Association in 1933, a resolution was adopted authorizing the Council on Medical Education and Hospital: (1) to formulate standards of administration based in general upon those of the American Boards of Ophthalmology, of Otolaryngology, of Obstetrics and Gynecology, and of Dermatology and Syphilology, and (2) to recognize officially new boards meeting these standards, this recognition to be based upon previous approval and recommendation to the Council by the Advisory Board.

A constitution and by-laws for the Advisory Board was adopted at a meeting in Chicago on February 11, 1934. The original member organizations of the Advisory Board for Medical Specialties were: the Association of American Medical Colleges; the American Hospital Association; the Federation of State Medical Boards of the U.S.A.; the National Board of Medical Examiners; the American Board of Ophthalmology, founded 1916; the American Board of Otolaryngology, founded 1924; the American Board of Obstetrics and Gynecology, founded 1930; and the American Board of Dermatology and Syphilology, founded 1932. Two representatives were appointed from each of these organizations to serve on the Advisory Board. Since that time, the American Board of Pediatrics (1934), of Psychiatry and Neurology (1934), of Radiology (1934), of Orthopaedic Surgery (1935), of Urology (1935), of Internal Medicine (1936),

of Pathology (1936), of Surgery (1937), of Anesthesiology (1938), of Plastic Surgery (1938), and of Neurological Surgery (1940) have been properly organized, approved and elected to membership in the Advisory Board and recommended to the Council of Medical Education and Hospitals of the American Medical Association for official recognition. There are, therefore, fifteen examining boards now organized, approved, and actively functioning in the fifteen specialties recognized as suitable fields for the certification of specialists.

The work of this board has been aided by grants from the Josiah Macy, Jr., Foundation of New York, but the board is now supported by its component groups.

Article II of the constitution states: "This Board shall act in an advisory capacity to such organizations as may seek its advice concerning the co-ordination of the education and certification of medical specialists." Specifically, this represents an official effort to advance the standards and improve the methods of graduate education and training in the medical specialties, with certification of men thus educated and trained who qualify as specialists in the various branches. The common interest of the member organizations in these purposes is obvious. It is equally apparent that some fixed definition of specialties needed to be established, preferably on a graduate educational basis, that minimum standards of organization and conduct for new examining boards should be fixed, and that some official method of recognition be developed.

There is no desire on the part of these boards to interfere with any practitioners of medicine in any of their regular or legitimate activities. Their fundamental purpose is to ensure to the public, both lay and medical, and for their protection, that physicians claiming to be specialists, with presumably special proficiency in one or another branch of medicine, actually possess the qualifications they claim. This presupposes special training and demonstrable capability along certain lines of work. Suitable evidence of this is the ability of an individual to satisfy an examining board about his training and then to pass the examination for certification.

Surveys of existing facilities for graduate training in the various specialties are being conducted at the present time; residences as well as preceptorship and assistantship training are being studied; preparations for stimulating medical school and hospital

facilities for the required graduate training are going forward actively; round-table conference furnish discussions of subjects of interest in regard to graduate medical education.

The Council on Medical Education and Hospitals of the American Medical Association has agreed, under the authority vested in it by the resolution passed at the Milwaukee meeting (1933) and referred to above, that applications of special examining boards for official approval are to be referred to the Council through the Advisory Board for Medical Specialties, recommendation by the Advisory Board for such approval to be based upon the standards mutually adopted. The understanding exists that the Council cannot be bound by recommendations of the Advisory Board, but will consult the Advisory Board for Medical Specialties before acting upon any application so long as mutually adopted standards are in force.

Early in 1940 there was published the first edition of the *Directory of Medical Specialists*, containing the names and biographic data of all men certified by the several specialty boards, as well as information regarding the organization and functions of these boards. The third edition (1946) carries the names and medical biographies of 23,107 diplomates of the fifteen specialty boards.

In response to the generally recognized need for a clear formulation of the educational problems and principles involved in graduate and post-graduate medical training, the Advisory Board at its meeting in June, 1937, voted to create a Commission on Graduate Medical Education to study the various aspects of the whole problem. This Commission included representatives of the profession, the specialties, the universities, the hospitals, the licensing bodies. The report of this Commission, comprising 304 pages, appeared in 1940, published by the University of Chicago Press, and is of real assistance to the various specialty boards, hospitals, medical schools, and regulatory bodies dealing with this phase of American medicine.

The Advisory Board is composed of two representatives from each of the approved examining boards in the medical specialties and such other national organizations as are interested in education, examination, and certification of medical specialists, and are duly elected to this body.

The constitution provides that "To be eligible for representation in this Board, an examining

board in a specialty must be composed of members elected from or appointed by societies recognized by this Board as a national society in that specialty, together with representation from the related section of the American Medical Association." Upon being accepted by the Advisory Board, the board in question is recommended to the Council on Medical Education and Hospitals of the American Medical Association as qualified for recognition. Membership in the Advisory Board provides for the inclusion of the name of the organization in all lists and directories published by the Advisory Board for Medical Specialties and provides also for publication of the names of specialists certified by each individual examining board.

This Advisory Board reports directly to its member groups, and functions in close co-operation with the Council on Medical Education and Hospitals of the American Medical Association, and with the Advisory Council on Medical Education.

Meetings of the Advisory Board for Medical Specialties are held annually as required.

The American Board of Surgery, for which alone I may speak officially, was organized January 9, 1937. A plan of this organization had been carefully studied by a general committee representative of certain general and sectional surgical societies called together through the initiative of the American Surgical Association. As a result of the deliberations of this general committee, a tentative plan of organization was adopted. This plan was reported to the co-operating surgical societies and was approved, with the understanding that the board, when organized, would have the power to change or modify the proposed plan as it saw fit. This board has been created in accordance with the action of the Advisory Board for Medical Specialties as approved by the Council on Medical Education of the AMA, which has named certain specialty fields as being suitable to be represented by such boards. These boards have the two-fold purpose of certifying those found to be qualified after meeting reasonable requirements, and of improving existing opportunities for the training of specialists within the field concerned. This is to be done for the protection of the public and the good of the specialty.

The co-operating surgical societies selected joint-

SPECIALTY BOARDS—RODMAN

ly to form the Board appointed their representatives as follows:*

The American Surgical Association.....	3
The Surgical Section of the AMA.....	3
The American College of Surgeons.....	3
The Southern Surgical Association.....	1
The Western Surgical Association.....	1
The Pacific Coast Surgical Association.....	1
The New England Surgical Society.....	1
	13

The term of membership is for six years. Each co-operating association has the appointing power of its representatives subject to the approval of the board.

Purposes.—(a) To conduct examinations of satisfactory candidates who seek certification by the board. (b) To issue certificates of qualifications to all those meeting the board's requirements. (c) To improve the opportunities for the training of the surgeon. (d) To set up principles of surgical education to apply to young men contemplating a career in surgery.

During the ten years the board has functioned, thirty different surgeons have served full or partial terms of membership.

The board has discharged its responsibilities by conducting examinations and has issued certificates of qualifications to those surgeons who have met certain, clearly specified, educational requirements and have successfully passed its examinations.

In discharging its responsibilities, the primary purpose of the board has been to establish and maintain a high standard in the education and training of the young surgeon.

The American Board of Surgery is not concerned with measures that might gain special privileges or recognition for its certificants in the practice of surgery. It is neither the intent nor has it been the purpose of the board to define requirements for membership on the staffs of hospitals. The prime object of the board is to pass judgment on the education and training of broadly competent and responsible surgeons—not who shall or shall not perform surgical operations. The board specifically disclaims interest in or recognition of differential emoluments that may be based on certification.

*The first three of these associations, being national in scope, were allotted three representatives each, the remaining associations one.

The requirements for all candidates will be as follows:

General Qualifications.—1. Moral and ethical standing in the profession satisfactory to the board.

The board, believing that the practice of "fee splitting" is pernicious, leading as it does to a traffic in human life, will reserve the right to inquire particularly into any candidate's practice in regard to this question.

2. Those whose activities are limited 100 per cent to the practice of surgery. This includes diagnosis, preoperative and postoperative care. It does not include obstetrics without surgical complications, or the general practice of medicine.

Professional Standing.—1. Graduation from a medical school of the United States or Canada recognized by the Council on Medical Education and Hospitals of the AMA, or graduation from a foreign school considered acceptable by the board.

2. Completion of an internship of not less than one year in a hospital approved by the same Council, or its equivalent in the opinion of the board. This internship may be rotating or one devoted to a single branch of medicine, as, for example, surgery, medicine, pathology, et cetera.

Special Training.—Candidates who have the following requirements will be eligible for consideration by the board:

Group I.†—Four years of education in surgery in a graded residency in one or more institutions. The training programs of hospitals must be approved by an appropriate committee of the board, in addition to the approval of the hospital for graduate training by the Council on Medical Education and Hospitals of the AMA or the American College of Surgeons. One year of the four may be in a subspecialty of surgery, such as thoracic, plastic, cancer, orthopedics, proctology, or gynecological surgery. If the second year of a two-year internship is surgical, and in a hospital approved for graduate training, it will be acceptable on the above four years.

*Group II***—In lieu of the requirements for Group I, the board will continue to accept, for

†A graded residency includes a period of training in which the trainee has increasing responsibility for the care and management of surgical patients. Adequate operative experience in which the candidate has assumed the whole responsibility will be required.

**An acceptable residency is one approved for graduate training in surgery by the American College of Surgeons or the Council of the AMA.

the present, three years of acceptable residency training, followed by two years of study or practice of surgery. The latter two years may be taken under one certified by the board and acceptable for this purpose to the board and carrying on his practice in hospitals fully approved as meeting the minimum hospital requirements of the American College of Surgeons.

Each candidate must have three years of acceptable training in general surgery. It is desirable that the three years of acceptable residency training of Group II applicants precede the two years allowed in the study or practice of surgery, although this is not essential. Not more than two of the five years required of Group II applicants may be spent in the sub-specialties of surgery, such as those listed above.

Basic Sciences.—This entire period of special training shall be of such character that the relation of the basic sciences of anatomy, physiology, pathology, bacteriology and biochemistry is emphasized. The board does not insist that any special length of time be spent in the basic sciences, but knowledge of these sciences as applied to clinical surgery will be required in the examination. One year's credit, however, will be given to recognized graduate school courses in these basic sciences which are an integral part of an acceptable university medical school. The board does not recognize short postgraduate courses for credit on the five years required of Group II candidates.

As a rule, not more than six months' credit is allowed for one year or more spent in any one of the basic sciences unless the candidate can show evidence of special training during this period, such as research, teaching, et cetera, directly under the supervision of, and an integral part of, an acceptable institutional training program in surgery. Under no circumstances, however, will more than one year's credit be given for work in the basic sciences.

The American Board of Surgery gave a great deal of latitude to a candidate seeking its qualification in the first ten years of its work. Being convinced, after this experience, that of those examined, the candidates who had formal residency training in addition to the actual practice of surgery were the better prepared, its requirements

(Continued on Page 772)

The Nursing Problem

By T. P. Murdock, M.D.
Meriden, Connecticut

THE NURSING PROBLEM, particularly that phase having to do with the shortage of nurses, is probably the most serious matter confronting American medicine today. Hospital authorities have been complaining of their inability to staff their institutions adequately. Doctors have maintained that seriously ill patients were being denied badly needed nursing care. Nurses are insistent that they have been carrying an enormous burden due to the shortage.

That the seriousness of the situation is appreciated one can readily see by the actions taken by several national medical organizations, including the American Surgical Society, the American College of Surgeons, the American College of Physicians and the American Medical Association. All of these organizations have appointed committees to study the problem.

A nursing structure study is being conducted by Dr. Esther L. Brown for the National Nursing Council on a grant from the Carnegie Foundation. Because of her background and training and experience, it is expected that her study will be comprehensive and her report is awaited with great interest.

All interested agree that there has been and is a shortage. There is some disagreement as to the degree and cause of the shortage and methods of correction. A recent survey by the American Hospital Association seems to indicate some relief. Replying to a questionnaire, 2,300 hospitals answered, and of this number 37 per cent replied that if more nurses were available they would not need to engage them. We hope that when our study is completed all of these questions will be fully and finally answered.

"Facts About Nursing, 1947" shows some very unusual and interesting figures. In 1940 there were 371,066 graduates and students in training. In 1910 there were 82,327. Of the number in 1940, 97.7 per cent were women and 2.3 per cent were men. And of this number, there were 7,066 female negro nurses and 127 were males.

Presented at the National Conference on Medical Service, Chicago, Illinois, February 8, 1948.

Dr. Murdock is chairman of the Committee on Nursing Problems of the American Medical Association.

"Facts About Nursing, 1946" also provides some very interesting and unusual figures. The number in active practice 317,800. The number admitted to training schools in 1940—38,000. In 1942—47,500. In 1943—53,074. In 1944—67,051. In 1945—57,000. In 1946—30,899. From these figures, one notices the large increase in numbers admitted to training schools from 1942 and including 1945. This, of course, is explained by the Cadet Nurse Corps program. Were the increases due to patriotism? Glamour of the uniform? The stipend? The answer to the whole problem is probably in these figures.

The demand for nurses increases by leaps and bounds. In 1910 there was one nurse per 1,116 people. In 1946 there was one nurse per 316 people. One million more patients were admitted to hospitals in the U. S. in 1946 than were admitted in 1945. Prepayment hospital and medical plans have and will have much to do with this problem. As the plans increase in number and subscribers, the demands for hospital staff nurses and private duty nurses will increase and will have to be provided.

A report recently released by the Women's Bureau of the U. S. Department of Labor is staggering. The release estimates that the number of nurses needed in 1960 will be 500,000 to 550,000. This is based on an estimated population in 1960 of 153,375,000. It is described as "a realistic appraisal of possible attainment rather than an estimate of what ideally is desirable." To obtain what they describe as "ideally desirable" would require twice this number. As the result of the cadet corps training, 44,700 nurses were graduated in 1947. This was the largest class graduated. This standard will have to be maintained during the period 1951-1960 if the estimated needed result is attained. These figures may be fantastic. I hope they are.

The economic studies present some interesting conditions. It is difficult to work out an average salary paid nurses in the United States. In 1946 it was estimated that the average income of the nurse was \$170 to \$175 a month. In 1947 one estimate placed it at \$185 a month. Another between \$175 and \$180. In general, the average week is forty-four hours. Social security is not provided. Only a few hospitals have provided retirement plans. The American Hospital Association has worked out a retirement plan. Only a

small percentage of nurses have taken advantage of this, and only a few hospitals carry it.

One could ask why the shortage of nurses? There would be many answers, and included in these would be (1) the general woman power shortage due to the competition of business in the labor market, (2) relatively small pay and long hours of work, (3) poor living conditions and lack of provision for recreation in training schools, (4) lack of retirement funds, (5) not being covered by social security, and (6) what the nurses describe as a hard medical and nursing hierarchy.

I think we can all accept the first and second premises with the woman power shortage and small pay. These young ladies actually take graduate work that in time, at least, is comparable to college training, and are then required to work for a salary that could easily be obtained in other lines of work and without the added three years of training.

In many hospitals the living conditions of nurses are poor. Dormitories are crowded. Little or no provision is made for recreation. This is due to lack of funds or short sightedness on the part of boards of directors.

Retirement funds and social security must be provided. This is not said from a moral viewpoint. On the contrary, these must be provided if hospitals and other health agencies are to compete with industry and business in general.

The files of the committee contain a great many letters from nurses severely condemning what, in general, they call the hard medical and nursing hierarchy. The nurses, in these letters, state that doctors have been unfair and unjust in their criticisms. Using their own phraseology, they say that doctors have "lorded it over them." They are also critical of hospital administrators and nursing educators because of their dictatorial attitudes. This should be and probably can be corrected.

What is to be done about all this? It is a big and difficult problem. It concerns us all personally, and more than that it concerns American medicine greatly. There are those who would use this situation as an indication of the need of compulsory medical and nursing care. This is not so, and I deny it vehemently. It insults ones intelligence to be told that governmental interference, and I use the phrase advisedly, would provide more or better nurses any more than it would provide more or better doctors.

I would like to say, at this time, that the nurses are as anxious as any group to have this problem solved. They have been most co-operative and helpful to the committee.

The committee will make its final report to the House of Delegates of the AMA at the annual meeting in June. The study is nearing completion. It would be improper for me at this time to present it here even as far as we have gone. The report belongs properly to the House of Delegates. When it is in, I hope it will please everyone.

I can say that a permanent conference committee has been formed. This committee is made up of representatives of the nursing profession, the American Hospital Association and the American Medical Association. The Board of Trustees has appointed a committee to represent the American Medical Association. This conference committee has already begun to function and will attempt to solve problems common to all. The committee continues its studies along the lines of (1) immediate relief, (2) future planning for training of bedside nurses and nursing educators, and (3) economic studies.

The American Medical Association intends that this problem will be solved, and more, that never again will America find itself in this position.

The president, Dr. E. L. Bortz, has stated that all of the resources of the American Medical Association are behind this study. The Board of Trustees and the chairman, Dr. Elmer Henderson, have given the committee complete support. The editor of *The Journal*, Dr. Morris Fishbein, has greatly aided the committee from his large fund of knowledge of this subject.

The committee asks the help of all the doctors in the United States. It asks the endorsement of the National Conference on Medical Care. It is receiving great aid from editors of a great many state and county medical journals. Many of the editors have written several editorials.

This problem is one for nurses, doctors and hospitals executives to solve. It is not the problem of any one group. The nurses are allies and aides to doctors. It must and will be solved with the generous co-operation of all. The committee of the American Medical Association seeks the aid of all physicians.

Professional Building

JULY, 1948

Nursing—Service Aspects

By Janet M. Geister, R.N.

Chicago, Illinois

IT TAKES COURAGE to try to find answers to the major nursing problems that beset us today. Never has there been so much adverse comment on nurses and nursing. Complaints of shortages in quality and quantity come from all sources.

In the present so-called "crisis" there are no new major elements. We simply have here the cumulative results of conditions that have been developing for twenty-five years. They have been aggravated and sped to a climax by the pressures of war, the postwar health hunger, and the move in our society toward higher rewards for workers.

There is nothing wrong that cannot be remedied, if enough have the will to apply the remedies. Nursing is *of* the public and *for* the public. The doctor, hospital administrator, health authority, the patient and general public have a direct interest in it; therefore, the help of all is needed in attacking the problem of nursing.

The help that is primarily needed is not money or tears—though money is a part of the answer. Essentially we need new ideas. The old ideas of nursing education and the use of nurses are at the root of our present troubles. It is footless to chide the profession; nurses as well as our inadequately nursed patients are victims of outworn ideas. "We're out of step with the times," says the *American Journal of Nursing*.

The immediate causes of shortages of hospital nurses are the increase in beds and unsatisfactory personnel practices. The immediate cause of half-empty nursing schools is the rejection of nursing as a career with suitable rewards. The basic causes, however, lie deeper.

We cannot separate quantity and quality shortages from their relationship to nursing education. The two areas are inextricably forged together. Nursing education has a dual function—that of providing nursing to hospital patients and that of

Presented at the National Conference on Medical Service, Chicago, Illinois, February 8, 1948.

Chairman of the Advisory Board of the American Association of Industrial Nurses; formerly an executive of the American Nurses Association.

educating for nursing. Hospitals instituted this dual system in the 1870's as a public service. As its economic advantages became apparent, however, the motive changed.

Though the system was satisfactory in earlier days, by 1922 we were being warned by the Rockefeller Committee on Nursing that it was unsound and would lead to serious trouble. Ten years later the Committee on the Grading of Nursing Schools repeated the warning. Yet today 90 per cent of our 1,242 schools of nursing remain subject to hospital economics.

The advances of medical science and the great patient surge to the hospitals have placed heavy new burdens on the student nurse. More patients to do more things for—more things to learn! Doctors add one new procedure after another in their diagnostic and treatment methods, and each doctor must have things done his own way. New medical procedures must be followed by new nursing techniques, and the nurse must know enough to carry out orders intelligently. We cannot entrust human life to an automaton. The 1948 nursing curriculum can no more be a 1925 model than can that of any other living group.

It is idle to cry that we have "over-educated nurses." There are no such things. There are some *wrongly* educated nurses—and small wonder! The struggle between ward and class room has become exceedingly grim. The student with one eye on the clock for classtime and the other on the order book has little chance to learn the hundred little knowledges that make up the art of nursing. Our 1,200 schools have an average student body of eighty-five; there simply aren't enough able faculties to go around.

The results of the dual load on students are evident. Of the 1946 class, 32 per cent withdrew before graduation, and not all for matrimony. That high record of failure retards enrollment. Seasoned nursing administrators tell me that much of the complaint for inadequate nursing centers on graduates of recent years. The assembly-line form of nursing education forced on us by the war was good for neither nurse nor patient.

Both the Rockefeller and Grading Committees warned against the pernicious and wide practice of employing graduate staff nurses merely to supplement the services of students. It places the student in competition with the graduate, a first source of the deep resentments that later factored

in the revolt from hospital work. This practice has delayed far too long the development of graduate staff nursing as a dignified, permanent, and substantial form of nursing. To it can be attributed some of the shortages that followed both World Wars. Hospital staff nursing still remains too much of a No-Man's Land—a blind alley.

The immediate causes of hospital nurse shortages are the greatly increased demand for nursing and the flight of nurses to other fields. Hospital bed occupancy increased 100 per cent in fifteen years—the nurse population but 13 per cent. Other fields are competing vigorously for quality nurses: industry, public health, the Veterans Bureau, Army and Navy Nurse Corps, doctor's offices, clinics.

Nurses were already turning away from hospital practice when the war sharply accelerated the movement. With many other jobs available, old resentments came to the surface. Inadequate pay was a handy limb on which to drape their grievances, but twenty-five other specific dissatisfactions with hospital duty are listed in the U. S. Bureau of Labor Statistics study. While 46 per cent were unhappy over the pay rates, 55 per cent complained of the lack of retirement and employment security. These things represent a most urgent need.

By the time conditions began to improve, it was the old story of "too little—too late." The changes were not basic enough, and nurses who had found useful employment elsewhere preferred to remain elsewhere. Too often the nurses drifting into the hospitals are those who cannot find jobs elsewhere. Then, the many splendid nurses who have carried the nursing load through the war and the postwar years, must work doubly hard to offset the indifferent and sometimes wretched nursing.

The market is still a "seller's" one. The good nurse who feels needed digs in even harder. The poor nurse, feeling indispensable, uses the moment for her personal advantage. She does the least, expects the most, and cries to Heaven over the injustices.

Hospital nursing should be our most attractive field. There is no good reason why it cannot be. The public must face the fact that nursing will cost more than it has. Good nursing, like good anything else, has to be paid for. The halo, too long offered as part pay, is a poor substitute for the hard cash the landlord wants. Nurses are reasonable in their requests. They want only to live as decently as other workers do, and they

do not want the alumni to support them when their legs give out.

Money alone, however, won't bring back the large numbers of quality nurses needed. Most of the twenty-six complaints listed in the Bureau of Labor study, other than those related to pay and retirement, deal with administrative practices. There isn't one, in my opinion, that can't be treated by some massive doses of the Golden Rule and common sense.

We humans criticize the things we don't understand. Few nurses can know the troubles that bedevil the administration, and few administrators know the troubles that bedevil the nurses. Both sides have their grievances. Patients need care nights and Sundays as well as in the hours nurses like best. Nurses want conditions that permit good nursing. Quality nurses hate hit-and-run work. They want something done about promotions, educational opportunities, avenues for settling grievances. The blind alley can and should become a main highway.

Money alone, I repeat, won't settle these matters. Only better pay and bringing nurses into the partnership will. Nurses have always had to obey the rules; why not let them help make the rules? They can be trusted. Recovery can come only from the free interchange of opinions and ideas—and subsequent compromise—from a 1948 concept of the principles of human relations. It cannot be achieved along the old lines of military discipline. We can no longer expect good nurses to be thinking people in relation to patient care, and robots about everything else.

Another major need relates to supervision. The stress of recent years broke down much of our good supervision, yet supervision is the very backbone of good nursing. Without it, inevitably the patient suffers. The doctor goes away; the family goes away; the floor manager must take the place of both in protecting the patient's interests. She is a four-way transmitter between doctor, patient, management and staff. If she stays unwrinkled and untroubled at her desk, then Heaven help the patient!

A good supervisor can strengthen weak nurses; a poor one can confound the best efforts of good ones. Six good nurses under a good supervisor can make circles around twelve mediocre ones under a weak supervisor. The best dollar investments of the hospital, in my opinion, are those put into quality supervision.

JULY, 1948

We cannot plan on huge numbers of nurses in the future. The U. S. Bureau of Education believes there will be fewer girls available who are suited for nursing. We must learn to use the nurses we have, and those we get, with greater economy. The new costs of nursing are an added reason for this.

Scarcities, plus the great increase in the chronic population, have brought the practical nurse into the scene. She is here to stay—the latest helper on the doctor's expanding team. Many nurses, however, do not understand the *why* of her coming, and resentment remains high. It is not surprising. Nursing leaders took little trouble to help nurses understand the reasons for her presence. Abruptly she was thrust upon us, and a profession long-trained to protect nursing standards was told to support schools and legislation promoting her use. Inequalities in pay and privileges have angered the professional nurses. These must be leveled off before there can be peace.

Some poorly prepared practical nurses have assumed prerogatives and authorities that have shocked the graduates. This is not true, of course, of the well-trained practical nurse, but she is still scarce. The lines of demarcation between the two realms are still not clear. One reason is that, through custom and tradition, many tasks that are hospital service and not strictly nursing have been a part of the graduate's job. Time, test and patience are needed to get the lines straightened.

No situation in hospital practice today calls more for intelligent handling. It is a mistake in any realm to go ahead of public opinion. The co-operation of staff and private duty nurses is essential to the successful use of the practical nurse. It can be gained only through understanding and a share in policy-making—not through orders. I have an infinite faith, that the average nurse, once fully informed, can be trusted to co-operate for the good of the whole.

A more economical and efficient use of nursing calls for the co-operation of everyone concerned. The doctor can help in many ways. When nurses inadvertently or carelessly confuse the practice of nursing with that of medicine, the doctor can help them understand where the line is. It moves as medical science advances. Some of yesterday's practice of medicine is today's practice of nursing. During the war some medical tasks were assigned to nurses. The line has since then been blurred. Good nurses don't want it that way. They want

to practice *nursing*. On the nursing school committee the doctor can help greatly in modifying or strengthening the curriculum, according to the demands made on nurses.

The administrator can save many *miles* of travel by readjusting traffic lanes and the physical setup. It is sheer waste for a nurse to walk half a block to sterilize a needle and even farther to get ice cubes. Hospital architects, charmed with

their long vistas, ought to consider the help's feet more.

Hospital boards, whose contact with hospital realities is too often only the paneled directors' room and the auditor's statement, have a responsibility for being better informed. The board president who said the eight-hour day had dimmed the light of Florence Nightingale's lamp might

(Continued on Page 814)

CORRECTION

In the paper, "Surgical Treatment of Carcinoma of the Breast," by Dr. S. W. Harrington of Rochester, Minnesota, which appeared on pages 40 to 50 in the January, 1948, issue of *THE JOURNAL* (J. Michigan M. Soc., 47: 40-50, Jan., 1948), Figures 5 and 6 were incorrect. The corrected Figures 5 and 6 are presented here.

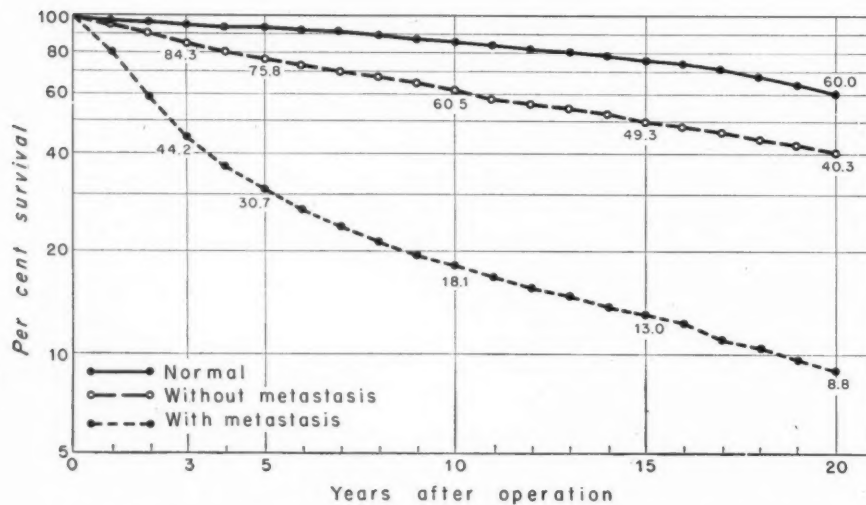


Fig. 5. Survival rates of patients who had undergone radical mastectomy for unilateral carcinoma of the breast with and without axillary nodal metastasis, as compared with normal life expectancy.

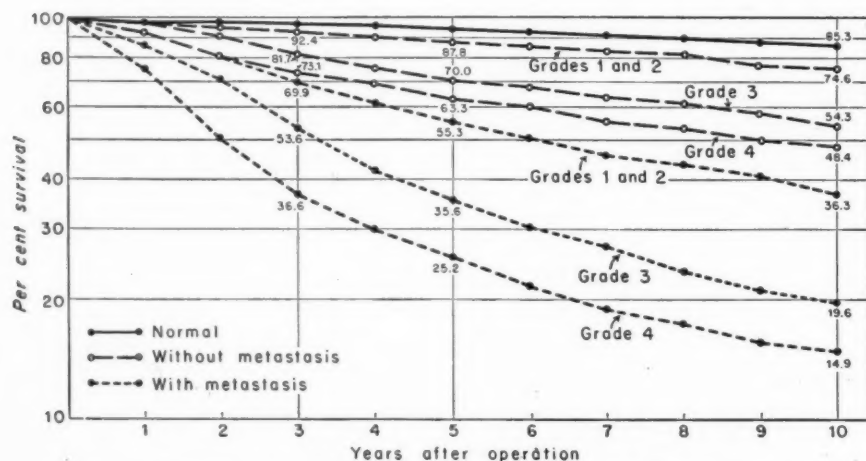


Fig. 6. Survival rates, by grade of malignancy of the lesion, of patients who had undergone radical mastectomy for unilateral carcinoma of the breast with and without axillary nodal metastasis, as compared with normal life expectancy.

Licensure to Practice

The objectives of the Basic Science Board and the Board of Registration in Medicine should be two:


First, to protect the public by preventing from practicing the healing art in Michigan those who are **not** qualified to practice.

Second, and more important, to assist in obtaining a license for those who are qualified and who wish to practice here. A proper corollary to this might well be to aid in every possible way those taking postgraduate work in an effort to better qualify themselves for licensure and practice.

So far as Doctors of Medicine are concerned, objective No. 1 is already a *fait accompli*. We doubt if any unqualified Doctors of Medicine are being licensed at this time.

The efforts to accomplish the second objective have been woefully bungled. With no thought of placing blame on any individual or group of individuals, suffice it to say that the present situation is bad. We need more Doctors of Medicine, especially in rural areas. We need to offer our splendid hospital training facilities to the graduates of our medical schools and medical schools from other states without the formality of license to practice during the training period. We need a reasonable reciprocity with other states for men licensed to practice in those states. We have none of these things now.

That Governor Kim Sigler and his special counsel, Mr. H. H. Warner, have taken an active interest in this problem, is wholesome. We deeply appreciate their efforts and sincerely hope they will follow through until all possible corrections have been made.



President, Michigan State Medical Society

President's



Page

Editorial

UNTRUE TRUTHS

HITLER BUILT his whole career on repeating and repeating half truths or untruths. Stalin seems to be having much success by not telling the whole truth—by misleading people by misrepresentation. The whole Communistic movement is built upon taking a partial truth and building it up by repeated telling, so that the hearers believe it in the end. It is a well-known psychological principle that if told sufficiently often, and with conviction, any untruth may seem to be fact.

The socializers of medicine are working on that principle. Any minor unsatisfied health needs of the people have been so stressed that many people believe them to be major. F.S.A. Administrator Oscar R. Ewing is quoted in the *New York Times*, April 18, 1948, as saying, "While it is true that some sections in the United States have medical care equal to that anywhere in the world, it is also true that in many areas in the United States the medical facilities are among the worst in any civilized country."

We have repeatedly mentioned exaggerated claims in the program for socialization, and now have another sample which, on the face of it, appears to be pure propaganda. This time the propaganda effort has taken the form of a book for the information of the public. The old and tried idea of exaggeration is foremost.

"YOU AND YOUR DOCTOR"

SUCH IS THE title of a very cleverly written book just off the press. The author, Benjamin F. Miller, M.D., is clinical professor of medicine at George Washington Medical School and research associate in medicine of the National Research Council. He was formerly associated with the University of Chicago Clinics and the United States Public Health Service. We were told about this book by a layman; we sent for it, paid \$2.75 for it, and noted the copyright reservation: "All rights reserved. This book, or parts thereof, may not be reproduced in any form without permission of the publishers." We immediately wrote the publisher asking permission to make quotations in a possible review for the *Journal of the Michigan*

State Medical Society. We waited six weeks and received no reply, so shall make no quotations.

The book is a definite argument for government-controlled group practice of medicine. The author mentions the Wagner-Murray-Dingell bill several times as ideal; he says there are just two agencies which can co-ordinate complete medical service for the whole nation: the American Medical Association, of which he claims to be a member, and the United States Public Health Service, of which he has been a member and now holds a reserve commission. The former will not see anything but private practice, and the latter can do the job, in fact was designated in the Wagner-Murray-Dingell bill.

The author claims throughout the book that the present method of practicing medicine by private endeavor is wholly inadequate to give the public the supreme service to which every individual is entitled, and the costs are also too high. His facts have a modicum of truth, but are so exaggerated that a false impression is given of what a patient can reasonably expect, with the implication that too many things are neglected, the distribution of special skills are inadequate, and the absence of clinics so obvious that proper study of the case is impossible.

To point the necessity for such a change in the practice of medicine, Dr. Miller discusses many problems, among them the impossibility for the private practitioner to secure specialist advice and counsel in most of his cases because the patients cannot afford to pay. Broad statements are made that sound plausible to the reader, but does any well-informed doctor of medicine believe that today 40 per cent of our counties lack any supervision of health standards? He implies that an enormous mass of the population is helpless. Speaking of emotional illness, he says that in any city of less than 100,000 it would be difficult to find any physicians trained in psychotherapy. The statement is also made that one person in every fourteen needs psychiatric study, which, if adequately done, would take from eighteen months to three years and would cost \$1,500 to \$3,000 per year. He advocates that the government take over this task. A true picture? Or fantastic?

Dr. Goin and many others have analyzed the

selective service records, and have shown how they have been misquoted; but they have shocked this author out of any complacency because well over 4,000,000 young men were rejected for medical reasons.

Another reason for the need of Wagner-Murray-Dingell and group practice on a large scale, says Dr. Miller, is the tremendous rush the average doctor is under, and his utter impossibility to find time or facilities to give his patients the care they are actually entitled to. To prove this point, an average day of an average general practitioner in a city of 50,000 is outlined in great detail. This general practitioner must do his own surgery because there is no good surgeon in less than 200 miles. (Do you believe that?) This doctor's schedule is: a very elaborate 10 minute wash-up of the hands and arms, followed by immersion in disinfecting solution, because the surgeon must have sterile hands; then follow: two tonsillectomies, done first; a herniotomy; a gall-bladder resection, which would have been sent to a surgeon if one had been available; a thyroidectomy for a toxic goiter; a call to a house for an obstetric case, for which hospitalization has to be arranged; a house call for a heart patient for whom portable electrocardiogram is ordered; ten routine house calls; an office full of patients; before they are finished, a call to the hospital for the obstetric case, which proved to be version; then, office work in the evening.

We wonder if any of our general practitioners are that busy. It looks like a distorted picture, the same as the other matters described; the author's pet theme is that most of our general practitioners, to be prepared for their manifold tasks, really need seventeen years of hospital training. He proposes that they become instead "pilot physicians," to look after minor things and to refer the patients to the proper specialists for better care.

The only good feature we were able to see in the book is the price, which will assure that its readers will be few. We have been impressed by the temerity of this doctor, writing about the practice of medicine when he very evidently has been an educator or administrator. Where does he get his experience?

COMPULSORY HEALTH INSURANCE

BY THE TIME this number of THE JOURNAL is distributed, the national political conventions will be over, and we will all know the possible

trends of social change, especially the changes in what we choose to call political medicine, or by its time-honored term, "socialized medicine." We have samples in most other countries, and we do not like them. Neither do the people, the patients. We hesitate to contemplate the future of medicine in Great Britain, but we must face facts.

It can happen here. President Harry S. Truman, in his "presidential tour" of the country, in his very first speech reiterated his demands for a national compulsory health service. We all know where he stands, and his whole administration—especially the entrenched bureaucrats, Falk, Altmeier, Ewing, to mention only three.

Governor Thomas E. Dewey of New York has stated repeatedly that he is positively opposed to any kind of socialized medicine or compulsory government sickness insurance. He promises a complete house cleaning in Washington.

"Compulsory socialized medicine is no good. No variation of it is any good. It has never worked. It cannot be done. . . . It would utterly destroy the quality of medical care. . . . If a thing is evil the first job is to convince the people that it is evil and is thoroughly evil, and destroys everything that we believe in. I am unalterably opposed to it."*

Senator Robert A. Taft of Ohio has taken a well-known stand in complete opposition to socialized medicine, and has fathered the only proposal that we as medical men can accept. His bill protects us from the fear of socialization. He has spoken in Michigan, and we have published his remarks.

Harold Stassen's position can best be understood by studying his own words:

"I propose specifically that our Republican Party adopt as its program that it will inaugurate a system of medical and health insurance to cover major cases, and only the major cases. This could be done with reasonable administrative simplicity by basing it first of all upon the coverage of those on social security for medical and hospital expenses in excess of \$250 in a single calendar year. By an effective administrative establishment requiring the verification of claims, *the reasonableness of charges*, and a *spot-check for improper bills*, the entire system could be efficiently and effectively administered on a *federal-state basis*. . . . *I see no manner of effectively providing this protection except through action by government.*" (Italics ours.)

Governor Earl Warren of California is for socialized medicine. He promised the doctors of

*Speech before the House of Delegates, Oregon State Medical Society, May 1, 1948.

California to oppose the measure, but himself stimulated legislation to bring it about. The doctors of his state were chagrined and irked, and only succeeded in defeating his program by one vote. Advocates of the governor are now going about the country telling workers that the medical society has Governor Warren all wrong, that he is not really in favor of socialized medicine. And many people are believing that the medical profession is misinformed.

Henry A. Wallace is all out for the extension of social welfare, including complete medical care for everyone.

Our own Arthur H. Vandenburg, has told us where he stands—unalterably opposed to socialized medicine. He complimented Michigan on an outstanding fight against socialized medicine, and dubbed our Blue Cross-Blue Shield a great public trust.

DRAFTING DOCTORS

DOCTORS, DENTISTS and possibly some other "scarce" occupational groups will face a special draft under military manpower legislation now being considered by Congress. House Bill 6401 provides for the common defense by increasing the strength of the armed forces. One section of the bill would authorize the President, pursuant to requisitions submitted by the armed forces, to require a special registration of and make special calls for members of the medical profession who have not reached the age of forty-five years at the time of such call. Physicians so called would be liable for induction, for a period not to exceed twenty-four months in the armed forces. By this section, physicians over the age limit applicable to inductees generally would be singled out as a group from their fellow citizens for special draft, induction, or selection.* Other citizens would be exempt if over twenty-six.

Never in history have doctors failed to respond for needed service in the military, and we have no reason to believe that times have changed. Older doctors will thus be provided, and the younger ones will be included in their own age groups of inductees, and doctors are now being graduated well under twenty-six. These would probably provide most of the physicians essential, except for the leavening of older heads. This latter would be met voluntarily.

The immediate needs of the Army and Navy

*Eliminated in final passage.

Medical Departments could justly be met from the ranks of some 8,000 or 9,000 civilian doctors who are in their twenties, whose professional education was, in part at least, paid for by the government, and who have given no, or very little, service in return.

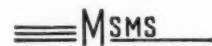
The Council on National Emergency Medical Service has urged the immediate establishment of a civilian medical board at the highest level of government, similar to the National Security Resources Board, to be responsible for the medical, health, and sanitary services of the civilian population, of industry, of agriculture, and of the armed forces in time of emergency or national mobilization. The establishment of such a board is absolutely essential to prevent a repetition of the thinning of the ranks of civilian physicians.

We suggested early in the last war that the names and numbers of physicians needed by the military be determined, indoctrination be given, the doctor returned to private practice until needed. His needed service could be anticipated in sufficient time for formal training and conditioning.

UNETHICAL DOCTORS

In a report on his program to weed out unethical doctors in the veterans' outpatient departments, Dr. Paul B. Magnuson said twenty-eight cases had come to light. Only a few criminal cases were found. These have been referred to local district attorneys.

The unethical doctors are being dealt with by state medical societies, which discipline offenders and remove them from the rolls of men eligible to practice veterans' medicine. The medical director said he was pleased that only twenty-eight violations have been discovered among 87,000 doctors.—*Editorial, Hospitals Journal, May, 1948.*



BENIGN PULMONARY HISTOPLASMOSIS

(Continued from Page 740)

7. Hausmann, G. H., and Schenken, R. J.: A unique infection in man with a new yeast-like organism. *Am. J. Path.*, 9:925, (Nov.) 1933.
8. Heller, E. L.: Communication, report of blood smear, (Jan. 10) 1947.
9. Kuzma, J., and Shuster, Myron: Histoplasmosis, et cetera. *Wisconsin M. J.*, 45:591-595, (June) 1946.
10. Morgan, D. K.: Histoplasmosis, et cetera. *Bull. School Med., Univ. Maryland*, 30:69-79, (Oct.) 1945.
11. Palmer, C. E.: Nontubercular pulmonary calcifications, et cetera. *Pub. Health Rep.*, 60:513-520, (May 11) 1945.
12. Parsons and Zarafonitis: Histoplasmosis in man. *Arch. Int. Med.*, 75:1, 1943, and (a) 75:1-23 (Jan.), 1945.

Committee Annual Reports

ANNUAL REPORT OF BEAUMONT MEMORIAL COMMITTEE—1947-48

As stated in our previous report, Professor Lorch, Professor Emeritus of the School of Architecture, University of Michigan, has been very interested in endeavoring to get the original plans of the Early House, which is situated at the site of the store of the American Fur Trading Company in which Alexis St. Martin was injured. A number of meetings have been held with Professor Lorch, who now has some very interesting material as a result of his long search.

The Committee is planning to have a meeting some time in June to consider these findings of Professor Lorch, and at that time we hope to meet with the members of the Mackinac Island State Park Commission so that plans for development of the Early House as a museum may be furthered.

Respectfully submitted,
F. A. COLLIER, M.D., *Chairman*
F. C. KIDNER, M.D.
A. W. LESCOHIER, M.D.
H. C. MAYNE, M.D.

ANNUAL REPORT OF COMMITTEE ON NATIONAL EMERGENCY MEDICAL SERVICE—1947-48

Your Committee on National Emergency Medical Service has engaged in the following activities during the year 1947-48.

At the request of the chairman of The Council, the chairman of this committee attended the meeting of the National Emergency Medical Service Council of the American Medical Association in Chicago on April 5 and 6, 1948. Following this meeting, his report was presented to the Executive Committee of The Council of the Michigan State Medical Society, by whom it was referred to this committee.

The committee met on May 18, 1948, and considered the above report and the recommendations contained therein, suggesting that The Council put these recommendations into effect.

There have been no other activities during the year.

Respectfully submitted,
H. F. BECKER, M.D., *Chairman*
W. H. GORDON, M.D.
R. F. HAGUE, M.D.
J. A. RAMSEY, M.D.
S. W. HARTWELL, M.D.
W. G. ELLET, M.D.
W. H. ALEXANDER, M.D.

ANNUAL REPORT OF ETHICS COMMITTEE—1947-48

Your Ethics Committee begs to report that it has had nothing to do during the past year. No County Medical Society has referred any matters to this committee, an appellate body.

This denotes a very healthy condition of affairs and is evidence of harmony within the profession.

Respectfully submitted,
G. B. HOOPS, M.D., *Chairman*
A. J. BAKER, M.D.
L. W. GEIB, M.D.
L. C. HARVIE, M.D.
L. J. MORAND, M.D.
R. S. MORRISH, M.D.
W. E. NESBITT, M.D.

ANNUAL REPORT OF THE ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY—1947-48

No formal meetings were held but the members were advised by communications as to various activities mentioned by the Executive Committee of the Michigan State Medical Society. Their opinions and any suggestions they had to offer were requested at that time.

However, the chairman with Dr. Amos did meet with the officers and members of the Woman's Auxiliary on two occasions, the first on December 10, 1947, at which he stated that he felt his committee was more of a liaison body than advisory.

The other occasion was at the home of the president of the Auxiliary to the Michigan State Medical Society, Mrs. T. Grover Amos. Also attending were President-Elect Mrs. Willis L. Dixon, Dr. LeRoy Hull, Dr. T. Grover Amos and Mr. Hugh Brenneman.

Out of that meeting arose the following suggestions:

1. That the president of the Auxiliary have some say in the election of the chairman of the Advisory Board and possibly one of its members—these doctors to be interested in Auxiliary activities.

2. That both the Advisory Committee and the officers of the Auxiliary be notified at the beginning of their term as to their relationship and duties.

Respectfully submitted,
T. P. CLIFFORD, M.D., *Chairman*
T. G. AMOS, M.D.
ALFRED LABINE, M.D.
C. W. OAKES, M.D.
P. A. RILEY, M.D.

ANNUAL REPORT OF COMMITTEE ON INDUSTRIAL HEALTH—1947-48

The Committee on Industrial Health held a meeting in Lansing on February 4, 1948, for the purpose of formulating plans for the year. It was felt to be too late in the year for developing plans for a spring meeting. It was proposed as an alternative that an offer of aid in planning and arranging a regular schedule meeting for County Medical Societies be extended to most counties of the state. The plan as finally developed was to offer to county societies a speaker or a panel of speakers for use as a regular medical meeting some time during the year.

The details of working out the plan, of contacting county societies and of securing speakers were left in the hands of the chairman and these plans are now being developed.

Respectfully submitted,
H. H. GAY, M.D., *Chairman*
A. L. BROOKS, M.D.
W. P. CHESTER, M.D.
HENRY COOK, M.D.
W. A. DAWSON, M.D.
V. S. LAURIN, M.D.
K. E. MARKUSON, M.D.
J. D. MILLER, M.D.
N. W. SCHOLLE, M.D.
C. D. SELBY, M.D.
H. T. SETHNEY, M.D.
M. W. SHELLMAN, M.D.
E. C. SITES, M.D.
F. B. WILLIAMSON, M.D.
J. L. ZEMENS, M.D.

COMMITTEE REPORTS

ANNUAL REPORT OF STATE INTERPROFESSIONAL COMMITTEE—1947-48

Two meetings of the committee were held during the past year. The first meeting was in conjunction with the Detroit Interprofessional Council on November 18, 1947, and the second meeting was February 8, 1948, in the Porter Hotel, Lansing.

Following the two meetings of the committee, local Interprofessional Council movements have been inaugurated in Flint by Dr. S. T. Flynn; in Saginaw by Dr. L. C. Harvie; and in Lansing by Dr. K. P. Hodges.

The Interprofessional Council of Detroit has secured a State Charter. This was done to protect the name "Interprofessional Council." As the various groups throughout the state become organized they will be admitted to state membership. It is the hope of your committee that other groups will form so that a strong state organization will ultimately develop in the near future.

Respectfully submitted,
W. W. BABCOCK, M.D., *Chairman*
V. C. ABBOTT, M.D.
C. S. CLARKE, M.D.
S. T. FLYNN, M.D.
S. W. HARTWELL, M.D.
L. C. HARVIE, M.D.
K. P. HODGES, M.D.
R. G. LAIRD, M.D.
E. C. MILLER, M.D.
G. W. SLAGLE, M.D.

ANNUAL REPORT OF COMMITTEE ON NURSES TRAINING SCHOOLS—1947-48

The Michigan State Medical Society's Committee on Nurses Training Schools held no meeting during the year of 1948. Inasmuch as a permanent committee has been formed comprised of a committee of doctors representing the Michigan State Medical Society, the Michigan State Nursing Association and the Michigan Hospital Association to cover more comprehensively the work of the training school in the hospitals, it seems superfluous to call a meeting of the committee when more can be accomplished through the permanent committee.

Respectfully submitted,
C. G. CLIPPERT, M.D., *Chairman*
R. L. HAAS, M.D.
H. D. MCEACHRAN, M.D.
E. A. OAKES, M.D.
W. J. SMITH, M.D.
R. A. SPRINGER, M.D.
D. W. THORUP, M.D.

ANNUAL REPORT OF COMMITTEE ON DISTRIBUTION OF MEDICAL CARE—1947-48

This committee did not hold a meeting during this period. A short time after the annual meeting in 1947, the chairman wrote a letter to the Executive Secretary asking him for advice on the necessity of holding a meeting, and to please let me know if there were any matters to be considered by this committee.

In the early part of 1948 a personal letter was written to each member of this committee asking him if he knew of any problems that should be considered by us. To date no matters have been referred for consideration.

Respectfully submitted,
C. W. COLWELL, M.D., *Chairman*
R. H. BAKER, M.D.
H. F. DIBBLE, M.D.
E. M. VARDON, M.D.
J. A. WITTER, M.D.

ANNUAL REPORT OF CHILD WELFARE COMMITTEE—1947-48

The Child Welfare Committee had two formal meetings during the year, at which time many items of interest were under discussion.

Particular attention was given to the revision of the manual on "Immunological Procedures" which is to be published and distributed by the Michigan Department of Health, carrying the approval of the Michigan State Medical Society and the Academy of Pediatrics (Michigan branch).

One of these meetings was held at the State Laboratory, so that members of the committee had opportunity to observe the excellent facilities provided for the manufacture of biologicals.

For the coming year, it is recommended that the committee pay particular attention to the problem of prematurity.

Respectfully submitted,
R. M. KEMPTON, M.D., *Chairman*
MOSES COOPERSTOCK, M.D.
CARLETON DEAN, M.D.
A. M. HILL, M.D.
J. L. LAW, M.D.
R. J. MASON, M.D.
A. L. RICHARDSON, M.D.
R. S. SIMPSON, M.D.
L. P. SONDA, M.D.
KENNETH WELLS, M.D.

ANNUAL REPORT OF COMMITTEE ON RHEUMATIC FEVER CONTROL—1947-48

The Committee on Rheumatic Fever Control has had five formal meetings and contemplates two more before the annual meeting in September. In addition, several meetings of subcommittees and individuals have been called on short notice to cope with the many urgent and special problems as they arose.

In addition to the multitudinous problems of policy and operation of the various centers the year's activities have seemed worth while. There are now thirty centers established in Michigan covering every county in the state. Through these centers have gone 3,000 patients, 414 of whom have been given a diagnosis of rheumatic fever.

The committee has accomplished many things and has established the foundation for much future activity and expansion.

1. Activated sixteen centers in Wayne County involving the participation of every major hospital in the area. Activated a new center in Alpena and another in Muskegon. Each had an appropriate program in which one or more members of the committee participated.

2. Established a file on Methodology as to the operation and conduct of each center.

3. Revised financial records and reports of all centers.

4. Written articles for THE JOURNAL and established interviews with the press local, state and national, publicizing our Michigan Program.

5. By invitation talked to thousands of people in Michigan on various subjects pertaining to Rheumatic Fever.

6. Edited and printed a brochure on diagnostic standards to be used particularly in Wayne County. Edited and printed a brochure for lay consumption explaining the Michigan Plan of attack on the Rheumatic Fever problem.

7. Furthered and encouraged the already existing very fine lay co-operation, particularly that exhibited by the Alpha Phi Sorority.

8. Restated to the physicians of Michigan the policy of the State Medical Society in the following letter:

"Dear Doctor:

"Your County Medical Society, in co-operation with the Michigan State Medical Society, has established a Committee on Rheumatic Fever Control to assist the physician in diagnosing and fol-

COMMITTEE REPORTS

lowing cases of rheumatic fever. This Committee has the patient's and physicians' interests at heart and cannot function unless given the 'go ahead' by the attending physician. This is one Public Health activity directed and developed solely by practicing physicians.

"Your patient,....., has returned home to your care. Your Rheumatic Fever Center would be happy to assist you in the follow-up of this case. Such a follow-up, done only with your permission, would provide statistical data on cardiac disease and rheumatic fever and would also insist that the patient return to you and be kept under your personal care. Re-checks of this case will be gladly done for you from time to time if you desire.

"May we hear from you relative to your wishes in this matter.

"Fraternally yours,

.....M.D."

Chairman (Center)

9. Attempted to form liaison with the American Heart Association by numerous personal contacts and correspondence as finally exhibited by the following letter:

"Increased financial support for study and care of heart disease, of which rheumatic fever is a prominent part, is desirable.

"A national campaign to support this work is in preparation. The pioneering experience of the MSMS warrants that in any such program in this state, the MSMS should constitute the body through which the activity should be channeled, and that funds accruing from any campaign for the above-mentioned purposes be utilized under the direction of the Rheumatic Fever Control Committee and other appropriate committees of the MSMS and in the expansion and furtherance of their programs.

"This statement is contingent upon the understanding that a major portion of any funds raised in this state as a part of a national campaign shall remain in this State."

10. Established for future use a means of receiving monies donated for use in Michigan by using the Michigan Foundation for Medical and Health Education, Inc., as trustee.

11. Requested the appointment of a full-time medical co-ordinator.

12. Established very fine public relation with the Metropolitan Life Insurance Company whereby the program of the Michigan State Medical Society is adequately recognized in a film entitled "Be Your Age" which will be shown in Michigan theatres very soon.

The committee has continued to enjoy the fine support of the Michigan Society for Crippled Children and Disabled Adults and wishes to express its gratitude to the Society not only for financial aid but also for the splendid assistance and counsel of its Executive Director.

Respectfully submitted,

FRANK VAN SCHOICK, M.D.,

Chairman

N. E. CLARKE, M.D.

CARLETON DEAN, M.D.

L. F. FOSTER, M.D.

THOMAS FRANCIS, JR., M.D.

L. P. RALPH, M.D.

A. M. ROCHE, M.D.

H. H. RIECKER, M.D.

C. J. SMYTH, M.D.

MR. P. C. ANGOVE

ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE—1947-48

While the Committee on Preventive Medicine held but one meeting during the year, its advisory groups met often, discussed a wide variety of problems in their respective fields and arrived at constructive conclusions of benefit to the public and the profession.

Of special significance are the following activities:

1. Support of a new bill before Congress regarding the status of iodized table salt.

2. Arrangements for the publication of the results of the Michigan Child Health Survey.

3. A detailed study of cancer detection centers.

4. Approval of a comprehensive diet manual to be published by the State Department of Health.

5. Discussion of proposed amendments to the State Commitment law and preparation of a medical history

and physical examination outline for the general practitioner which will include a comprehensive application of psychiatric findings.

6. (a) A review of the present method of operation of tuberculosis case finding programs. (b) An effort to make more beds available for cases of tuberculosis and a request to the State Administration to provide more streptomycin for treatment of these patients. (c) Recommendation that a bill be introduced into the State Legislature making mandatory chest x-rays for all food handlers.

7. (a) A Venereal Disease conference program for general practitioners at Detroit on March 13, 1948. (b) Preparation of an outline of treatment for early and late syphilis. (c) Further review of laboratory examinations for diagnosis of syphilis offered by the State Department of Health. (d) Interpretation of laboratory procedures.

8. (a) Continued survey of maternal deaths in Michigan and proposed enlistment of county medical maternal health committees in this effort. (b) A review of existing state laws pertaining to therapeutic abortions and sterilization with consideration of necessary changes.

9. Activation of the numerous Rheumatic Fever Centers throughout the State.

More complete reports of the telling effort put forth by each of the advisory committees appears in this booklet and deserve attentive reading.

The committee is collectively grateful to the State Department of Health for its helpful co-operation.

Respectfully submitted,

W. S. REVENO, M.D., Chairman

J. K. ALTLAND, M.D.

G. D. CUMMINGS, M.D.

H. H. CUMMINGS, M.D.

J. M. DORSEY, M.D.

H. H. GAY, M.D.

R. M. KEMPTON, M.D.

R. B. KENNEDY, M.D.

C. E. LEMMON, M.D.

R. D. MCCLURE, M.D.

R. M. MCKEAN, M.D.

N. F. MILLER, M.D.

H. M. POLLARD, M.D.

L. W. SHAFFER, M.D.

FRANK VAN SCHOICK, M.D.

ANNUAL REPORT OF COMMITTEE ON MENTAL HYGIENE—1947-48

Your Mental Hygiene Committee has held six meetings during the past year. It has been the expressed intention of the committee to continue and to advance the good work of the Mental Health Committees which have preceded it, and, in so doing, to pave the way for the further effort of the Mental Hygiene Committee for the next year. Although we have suffered from absenteeism, we understand the many urgent calls in the full life of the leading physician. Yet we feel under the necessity to represent forcefully the development of full attendance for this worthy cause of our group work.

Committee efforts have represented (1) extending responsibilities to our brother practitioners in the general and special fields of medicine, (2) compiling psychiatric data for neuropsychiatric history and examination procedure in general hospitals, (3) training of educators regarding the facts of mental health development, (4) working with legal and legislative groups to revise the laws dealing with psychiatric patients, (5) expanding effective relationships with associated societies dealing with mental health matters.

Your committee has observed with satisfaction the fruition of last year's committee work in setting up of a section on Psychiatry and Neurology in our State Medical Society. It has encouraged a systematic effort to further effective working relationships between the Michigan

COMMITTEE REPORTS

Society of Neurology and Psychiatry and all other medical societies. It gave special consideration to the commitment laws pertaining to the mentally ill, and one of its members, Dr. Morter, has prepared a study on the topic for publication in *THE JOURNAL*. Its capital project has been the undertaking of the development of a neuropsychiatric history and examination outline for the special use of the general practitioner of medicine. The whole committee has functioned as a task force in this area. To Dr. Currier has been assigned the leading responsibility for sustaining interest and application on this main assignment.

While great progress has been made, much remains to be done by our medical profession in the cultivation of mental health centers for infants, children, and adults. Our great lack continues to be mobilized qualified personnel. Two committee members are working with our Medical Society's Commission on Health Care to develop the program of Medical Associates trained to function as medical aides.

The mental health insights of psychiatrists have advanced much farther than has the possibility of applying these accumulations of wisdom to the pressing mental health needs of the people. There is an increasing demand for this understanding to go to work on a larger scale. It is most essential that the simple truths of developmental psychology be made available to the people. The cause of mental hygiene is the cause of upholding full respect for the dignity of the human individual. No mind has ever been helped except through being respected in its development; no mind has ever been harmed except through being disrespected in its development. Innocence of this mental health principle constitutes the greatest misfortune of mankind.

Your committee has witnessed, and furthered participation in, distinguishing developments of mental health education, both locally and on a worldwide basis. Michigan Mental Health Week designated by Governor Sigler as the week of April 5 through April 12 focused attention on what communities are doing to increase the application of mental hygiene. The International Congress on Mental Health to be held in London August 11 to August 21, 1948, represents a sustained world effort to promote mental health. May consistent enduring action characterize our mental hygiene program for Michigan.

Respectfully submitted,
J. M. DORSEY, M.D., *Chairman*
R. G. BRAIN, M.D.
F. P. CURRIER, M.D.
M. W. HOFFMAN, M.D.
R. A. MORTER, M.D.
B. M. MURPHY, M.D.
R. P. SHEETS, M.D.
R. W. WAGGONER, M.D.

ANNUAL REPORT OF COMMITTEE ON RED CROSS BLOOD BANK PROGRAM—1947-48

The Committee on Red Cross Blood Bank Program has met with representatives of the Midwestern Area, American Red Cross, on three occasions relative to its plan to establish blood bank centers in Michigan, the latter being a part of its nation-wide program to develop and maintain an integrated system of blood procurement stations.

The past few years have been marked by a vast increase in the use of whole blood and its derivatives as a therapeutic and life-saving agent. During wartime emergency, the Red Cross has definitely established its ability to obtain and process large quantities of blood, and it is the opinion of its governing board that it can be of equal service to the nation on a peacetime basis. The possible urgent necessity of a pooling of resources could occur at any time, and it is the hope of the Red Cross to be prepared for such a contingency. The suc-

cess of such a program depends largely upon a proper collaboration of local medical societies, hospital councils, and individual hospitals with the American Red Cross. The latter stands ready to render its services in such localities as need them; however, its policy is to enter only those communities where it is requested to do so by the local medical society.

It is the opinion of this committee that each county society should examine the adequacy of the blood supply in its area, whether for local peacetime use, or in time of disaster from any cause. The advisability of securing the advantages of a plan of such scope and possibilities rests entirely upon the local unit.

It is our opinion that the American Red Cross is the natural organization to conduct such a program, for it has the benefit of past experience in blood procurement through nation-wide organization, and possesses sufficient resources to carry it through to successful accomplishment.

Respectfully submitted,
R. S. MORRISH, M.D., *Chairman*
W. B. COOKSEY, M.D.
R. H. HOLMES, M.D.

ANNUAL REPORT OF MEDICAL LEGAL COMMITTEE—1947-48

No meeting of the Medical Legal Committee has been held during the past year. The function of this committee has been to act in an advisory capacity only and in conjunction with the Executive Secretary of the Society.

In our report last year we stated that advice had been given to one member of the Society who was threatened with a malpractice suit. This case involved alleged damage as the result of x-ray treatment administered with a diagnostic machine. The case came to trial but was settled during trial.

No other matters of medical legal nature were brought to the attention of the committee during the year.

Respectfully submitted,
S. W. DONALDSON, M.D., *Chairman*
C. E. LEMEN, M.D.
F. A. MERCER, M.D.
W. B. MITCHELL, M.D.
W. J. STAPLETON, JR., M.D.

ANNUAL REPORT OF THE COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION—1947-48

The Committee on Postgraduate Medical Education held two meetings, as usual, during the year 1947-48, the first on February 11, and the second on May 12, 1948. While only about one-half of the committee members were able to attend the meetings, the interest and enthusiasm of those attending were great. The extramural programs during the fall of 1947 and the spring of 1948 consisted of panel discussions. The program has been of this type for two years and, judging from the reports of the Councilors and many practitioners who attended, these panel discussions commanded much interest and were highly instructive.

The members of the Postgraduate Medical Education Committee, as well as the officers and members of the Michigan State Medical Society, wish to recognize the outstanding effort which was made by Dr. George J. Curry of Flint, and three of his associates, namely, Drs. Don L. Bishop, Hardy B. Elliott, and Harold W. Woughter. These men prepared and delivered a symposium on trauma, which was given in all of the teaching centers except their home city of Flint, and the five teaching centers in the Northern Peninsula. This symposium created wide interest throughout the state and was considered by the committee as an outstanding contribution to the Extramural Postgraduate Medical Education Program.

COMMITTEE REPORTS

A few changes were made in the Extramural Postgraduate Medical Education Program in the Northern Peninsula. The center of Sault Ste. Marie, which was re-established on May 26, 1947, showed a splendid attendance at the spring meeting of 1948. The program usually held in Houghton was transferred to Calumet, where a more desirable place was available. The attendance was equally good. Also, Iron Mountain instead of Powers was used as a center. The change was made to relieve Dr. John Towey who for years has borne the burden of arranging the details for the meetings at Powers. This move was recommended by Councilor W. H. Huron and other physicians in that part of the Upper Peninsula. Special commendation should be given to Doctor Towey for his conscientious and valuable service in the program of Continuing Medical Education in the Upper Peninsula.

The medical subjects selected by the committee and given in the different teaching centers of the state are as follows:

AUTUMN, 1947	
Panel Discussion:	Recent Advances in Therapy
Panel Discussion:	Trauma.
SPRING, 1948	
Panel Discussion:	Basis of Symptoms.
Panel Discussion:	The Acute Abdomen.
Panel Discussion:	Neoplasms.

A total of 1,173 doctors attended the teaching centers in the state. This was a decrease of forty-five doctors attending the meetings last year. About two years ago two of our oldest and well-established teaching centers annually showing a high attendance asked to have the postgraduate medical education programs separated from their regular county society meetings. The request was granted, but since that time the attendance has decreased markedly in both of these centers. This fact, in part, accounts for the lessened attendance. At the May meeting the Committee on Postgraduate Medical Education discussed fully the whole matter of interest in the State Society Programs, especially the decreased attendance in two centers. It was decided to contact these two centers by letter in order that their suggestions might be received and acted upon by the Committee. These communications have been sent out and copies of the replies will be mailed to each member of the Committee as soon as they are received by the Chairman.

The attendance record on the Extramural Centers was as follows:

Ann Arbor	91
Battle Creek-Kalamazoo	141
Bay City	78
Flint	148
Grand Rapids	119
Jackson	135
Lansing	122
Mt. Clemens	73
Saginaw	62
Traverse City	88
Upper Peninsula: Calumet, Iron Mountain, Ironwood, Marquette, Sault Ste. Marie.....	116
TOTAL	1,173

As in the past, teachers from both medical schools in the state took part in the teaching programs and in addition four outstanding specialists served as teachers. This information is given in the following table and list of names:

Wayne University College of Medicine.....	13
University of Michigan Medical School.....	23
Teachers affiliated with the Department of Postgraduate Medicine as Postgraduate Lecturers.....	4
TOTAL	41

Wayne

Clifford D. Benson, M.D.	Aage Nielsen, M.D.
Darrell Campbell, M.D.	Harry A. Pearse, M.D.
Wyman C. C. Cole, M.D.	William S. Reveno, M.D.
Ernest Gardner, M.D.	Charley J. Smyth, M.D.
Ralph A. Johnson, M.D.	Edward D. Spalding, M.D.
Richard M. McKean, M.D.	Edward Wishropp, M.D.
Harold C. Mack, M.D.	

Michigan

Paul S. Barker, M.D.	Norman F. Miller, M.D.
Frank H. Bethell, M.D.	Ralph M. Patterson, M.D.
Jere M. Bauer, M.D.	H. Marvin Pollard, M.D.
Robert W. Buxton, M.D.	William D. Robinson, M.D.
Kenneth N. Campbell, M.D.	John M. Sheldon, M.D.
Frederick A. Collier, M.D.	Cyrus C. Sturgis, M.D.
Jerome W. Conn, M.D.	Harry A. Towsley, M.D.
Moses M. Frohlich, M.D.	Raymond W. Waggoner, M.D.
William J. Fuller, M.D.	Ernest H. Watson, M.D.
A. C. Furstenberg, M.D.	Charles F. Wilkinson, M.D.
Stanley I. Glickman, M.D.	James L. Wilson, M.D.
Franklin D. Johnston, M.D.	

Other

Don L. Bishop, M.D.	George J. Curry, M.D.
Hardy B. Elliott, M.D.	Harold W. Woughter, M.D.

The Second Annual Michigan Postgraduate Clinical Institute was held in Detroit on March 10, 11, and 12, 1948. The general outline of the program was similar to the one given in 1947. It was well received by the doctors of the state. The number of physicians attending in the three-day meeting was 1,157. The Committee on Postgraduate Medical Education last year recommended the annual repetition of this program. After two trial years it is the unanimous opinion of the Committee that this medical educational effort be permanently continued.

During the year 1947-48, forty Certificates of Fellowship and twenty-two Certificates of Associate Fellowship in Postgraduate Education were issued by the Society.

Intramural Activities

The attendance on the intramural courses at the University of Michigan Medical School follows:

Electroencephalography	2
Clinical Exercises for Practitioners.....	40
Clinical Internal Medicine.....	48
Electrocardiographic Diagnosis	121
Pediatrics	37
Orientation Course in Allergy.....	13
Application of the Basic Sciences to Clinical Medicine.....	16
Decentralized Resident Training Program.....	29
Second Annual Seminar in Urology.....	79
Surgical Pathology (Slides).....	19
Anatomy	70
Refresher Course in Neuropsychiatry.....	5
Diseases of the Heart.....	37
Pediatrics	23
Metabolism and Endocrinology.....	27
Diagnostic Roentgenology	59
Otolaryngology Conference	39
Ophthalmology Conference	106
Diseases of the Blood.....	26
Diseases of the Gastro-Intestinal Tract.....	38
Allergy	24
Recent Advances in Therapeutics.....	21
Personal Courses (Interns, Assistant Residents, Residents, and Miscellaneous Registrations)	253
TOTAL	1,132

The registration on the above courses shows an increase of 139 physicians over the number attending last year. A total of 536 veteran physicians attended these courses.

A record of the Postgraduate Medical Education Program for the year 1947-48 at Wayne University College of Medicine is appended. This very active and useful program is serving a geographical area containing over one-half of the general practitioners of the state.

The committee takes this occasion again to thank the forty-one busy physicians who served as teachers in the Extramural Program. Their sacrifice and co-operation make possible the outstanding extramural postgraduate education program in Michigan. The committee hopes that some of the burden of teaching will be borne by other medical men in the state who are well qualified both in educational background and clinical experience to teach on this program. The committee wishes to express its thanks to the faculties of Wayne University College of Medicine and the University of Michigan Medical School for their wholehearted co-operation, and to the Michigan State Department of Health for its generous financial support of the lectures dealing with ob-

COMMITTEE REPORTS

stetrics and pediatrics. Finally, the committee is proud of the continued interest and support of the Michigan State Medical Society and of its membership that make these programs possible.

WAYNE UNIVERSITY COLLEGE OF MEDICINE				
Postgraduate Medical Education				
June, 1947-June, 1948				
	June Sept., 1947	Sept. Dec., 1947	Dec., 1947 March, 1948	March June, 1948
Number of doctors taking courses.....	11	131	110	116
Number of doctors who are veterans.....	7	92	72	71
Courses				
	Quarters			
	June	Sept.	Dec.	March
Surgical Anatomy			13	10
Advanced Histology			3	
Regional Anatomy				23
Problems in Neurology.....				5
Newer Bactericidal Agents.....		18		
Medical Bacteriology			2	
Immunology and Virology.....				5
Parasitology				1
P. Chemistry Seminar.....		7	6	
Survey of Med. Chemistry.....				16
Intermediary Metabolism.....				4
Nutrition and Metabolism.....				3
Dermatology Seminar		3	3	4
Conf. on Venereal Diseases.....		1		
Med. Pathologic Conf.....	5	7	3	6
Med. X-Ray Conference.....	6	4	6	5
Allergy Clinic and Conf.....	3	4	1	1
Electrocardiography		28	30	
Beginning EKG		5	1	
Diagnostic Conference			1	4
Gastroent. and Hematology Cl.....		7	6	6
Endocrinology		33		
Survey of Physiology.....			31	
Survey of Pharmacology.....		7		
Physical Medicine				3
Beginning Hematology		11	3	6
Advanced Hematology		1		1
Surgical Pathology		35		
Neuropathology			10	
Pathology of Neoplasms.....			27	
Gynecologic Pathology				32
Anesth. Theory and Prac.....			1	
Basic Ophthalmology (5 months' course)			12	
Child Guidance Clinic.....				1
Clin. Psychiatric Seminar.....				1
Neurologic Conference				5
Psychosomatic Conference				3
Beg. Physics in Radiology.....				2
Surgery Seminar		10	14	11

Respectfully submitted,
H. H. CUMMINGS, M.D., *Chairman*
E. I. CARR, M.D., *Vice Chairman*
B. R. CORBUS, M.D.
G. J. CURRY, M.D.
W. B. FILLINGER, M.D.
A. C. FURSTENBERG, M.D.
C. B. GARDNER, M.D.
R. H. HOLMES, M.D.
H. A. KEMP, M.D.
P. A. RILEY, M.D.
J. M. ROBB, M.D.
J. M. SHELDON, M.D.
E. D. SPALDING, M.D.
F. A. WEISER, M.D.
C. P. DRURY, M.D., *Advisor*
J. J. WALCH, M.D., *Advisor*

ANNUAL REPORT OF COMMITTEE ON VENEREAL DISEASE CONTROL, 1947-48

Three regular meetings of the Venereal Disease Control Committee were held during the past year: on January 18 in Lansing, on June 6 in Lansing, and on July 10 in Bay City.

At the first meeting, the Chairman discussed the decrease in venereal disease in evidence in Michigan for the first time since 1939, and possible explanations for the decrease. The laboratory examinations for the diagnosis of syphilis offered by the laboratory of the Michigan State Health Department were reviewed and discussed. The following recommendations were made: that colloidal gold tests need not be done on otherwise

negative spinal fluids; that routine cell counts should be made on all spinal fluids; that quantitative Kahn tests be done on all positive spinal fluid examinations, and that all laboratories in the state be encouraged to report quantitative tests in a uniform manner, preferably in units.

The advisability of a new program for revising and displaying new posters on venereal disease in public toilets was discussed. Arrangements have been made through the Michigan Department of Health to furnish 20,000 of these signs, prepared by the Michigan Bureau of Prison Industries; they will be distributed by the Michigan Liquor Control Commission to all licensees, and their display will be a condition of licensure.

A postgraduate program on the diagnosis and treatment of venereal disease, sponsored by the MSMS Venereal Disease Control Committee and the Michigan Department of Health was held at the Intensive Treatment Center, Herman Kiefer Hospital, Detroit, on March 13, 1948. Eight papers were given, and 159 physicians registered for the conference. This would seemingly show that physicians are interested in such presentations and that papers on the management of venereal disease should be included in future graduate conferences. The papers presented are to be published in an early special edition of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

At the second meeting further discussion was carried on with representatives of the laboratory of the Michigan State Health Department regarding facilities for more extensive use of quantitative serologic tests and special diagnostic procedures offered in cases suspected of having nonspecific reactions. Limited facilities make it necessary for the laboratory of the Michigan State Health Department to restrict such requests to an absolute minimum. It is requested that when financial means permit, such specimens should be sent to private laboratories. The Committee adopted a motion that the laboratories of the State Department of Health be requested to perform and report quantitative Kahn tests and complement-fixation tests on all positive marriage license examinations. The Committee suggests that such quantitative tests be performed by the same laboratory for more accurate interpretation.

The desirability of suggested outlines for the guidance of physicians on the most effective use of penicillin in the treatment of syphilis in its various stages and clinical forms was discussed at the first meeting. It was suggested that Drs. Curtis and Shaffer prepare such outlines. In spite of four years of experience with penicillin in the treatment of syphilis, only provisional outlines are as yet permissible. Instead of suggested outlines by our Committee which would be temporary and controversial in nature, it was decided to recommend the schedule prepared by the Syphilis Study Section, National Institute of Health for the Council on Pharmacy and Chemistry of the American Medical Association. The report entitled "The Status of Penicillin in the Treatment of Syphilis" appeared in the *Journal of the American Medical Association*, March 27, 1948, pp. 873-879. It is hoped to arrange for distribution of reprints of this article by the Michigan State Health Department to all members of the Michigan State Medical Society, together with a condensed outline of the schedules as prepared by the U. S. Public Health Service.

Respectfully submitted,
L. W. SHAFFER, M.D., *Chairman*
R. S. BREAKER, M.D.,
Vice Chairman

K. A. ALCORN, M.D.
A. C. CURTIS, M.D.
W. B. HARM, M.D.
RUTH HERRICK, M.D.
R. H. HOLMES, M.D.
H. L. KEIM, M.D.
E. S. PARMENTER, M.D.
FRANK STILES, M.D.
O. D. STRYKER, M.D.

COMMITTEE REPORTS

ANNUAL REPORT OF SCIENTIFIC RADIO COMMITTEE, 1947-48

A meeting of the Scientific Radio Committee was held in Ann Arbor, Michigan, on December 2, 1947, at which time various policies were reviewed relative to the medical broadcasts being conducted from the University of Michigan campus. After considerable discussion of programs which had been presented in the past, it was agreed that these broadcasts were of valuable nature and that they should be continued.

It was, likewise, felt by the Committee that the increasing portion of the broadcast should be given by physicians not associated with the University of Michigan campus. As a result of the meeting, thirty-nine programs were arranged for 1947-48, to be continuous except for the summer months. Sixteen of these programs were to be prepared by doctors not affiliated with the University of Michigan and these physicians were to be selected by the Scientific Radio Committee. Twenty-three programs were to be prepared by physicians associated with the Medical School of the University of Michigan. It was further agreed that all speakers were to make arrangements with Mr. Waldo Abbott for their speech transcriptions, thereby making it possible for the talk to be broadcast from the campus in Ann Arbor, as well as from eight other radio stations throughout the State.

It was understood by the Committee that these programs were to be a program of the University of Michigan and broadcast with the co-operation of the Michigan State Medical Society.

Respectfully submitted,

H. M. POLLARD, M.D., *Chairman*
D. K. BARSTOW, M.D.
R. E. BOUCHER, M.D.
T. T. CALLAGHAN, M.D.
H. A. KEMP, M.D.
J. H. McMILLAN, M.D.
S. G. MEYERS, M.D.
KENNETH TOOTHAKER, M.D.

ANNUAL REPORT OF COMMITTEE ON MICHIGAN HIGH SCHOOL ATHLETIC ACCIDENT BENEFIT FUND, 1947-48

This Committee has been rather inactive during the year. In a previous report it was recommended that County Medical Societies be stimulated to devote some time at one of their meetings to the objective of the High School Athletic Benefit Fund and to invite coaches and athletic directors to be present and to discuss their views on the subject. The Committee, last year, voiced its opinion that such action could be done on a local scale and to better advantage in order that both high school authorities and physicians might work together for the best interests of injured students. We have not received notice of any County Society having such a meeting.

A copy of the schedule of benefits effective for the 1947-48 school year was mailed to all physicians in the State.

This Committee recommended to the benefit plan that no allowance be made or benefits be paid for a fracture without x-ray evidence that a fracture did exist.

It was proposed by the Committee that the benefit plan adopt the Uniform Fee Schedule for Governmental Agencies but this proposal was rejected due to the fact that it would mean raising the present fees for each student, which, if enacted, would probably mean that a number of schools would drop the services of the benefit plan.

Respectfully submitted,

S. W. DONALDSON, M.D., *Chairman*
L. FERNALD FOSTER, M.D.
E. R. WITWER, M.D.

ANNUAL REPORT OF TUBERCULOSIS CONTROL, 1947-48

During this period, no problems were specifically referred to this Committee. At a meeting held on January 11, 1948, various matters pertaining to tuberculosis control were discussed.

The disproportion between the need for beds and the available supply was recognized and would appear to be in large measure due to lack of nursing personnel, rather than to lack of physical facilities or of funds. This shortage of nurses is not alone a problem of institutions for the tuberculous, but also of many general hospitals and is beyond the scope of the Committee.

While some comments have been made, unfavorable to the continued expenditure of funds in case-finding programs in view of the above shortage of beds, this was not concurred in by our committee and it was our opinion that this program should not only be continued but should be expanded so that all food-handlers should have chest x-ray.

Activities of the State Anti-Tuberculosis groups were a subject of discussion. The program of rehabilitation being sponsored by these groups is regarded as of great value to all people of the State and one of the important activities of these organizations.

The value of streptomycin in the management of various forms of tuberculosis is being increasingly demonstrated. Many questions remain to be answered and active support of programs aimed toward the solution of these questions is favored. We hope and expect that the legislature will continue to appropriate funds so that more Streptomycin will be available.

The Committee views with pride the continued high standing of Michigan in matters of tuberculosis control. Only further expenditure of energies in this direction will attain the distant goal when this disease will cease to be a major problem.

Respectfully submitted,

C. E. LEMMON, M.D., *Chairman*
J. L. EGLE, M.D.
CAMERON HAIGHT, M.D.
P. J. HOWARD, M.D.
W. L. HOWARD, M.D.
H. G. HUNTINGTON, M.D.
G. T. McKEAN, M.D.
V. C. JOHNSON, M.D.
J. D. LITTIG, M.D.
E. J. O'BRIEN, M.D.
L. A. PRATT, M.D.
R. A. RASMUSSEN, M.D.
J. W. TOWEY, M.D.
B. R. VANZALUWENBURG, M.D.

ANNUAL REPORT OF COMMISSION ON HEALTH CARE, 1947-48

The Commission of Health Care has devoted time this year essentially to the promotion of Medical Associates, and to the development of the Brochure on Medical Associates which will be presented to the House of Delegates at the annual meeting.

We wish to call to your attention the need for further promotion of certain divisions and the urgent need for recruits in other divisions. To meet the health needs of America effectively requires increasing personnel. Effort to that end by the medical and dental professions will enhance our technical effectiveness, promote favorable public relations, and diminish the need for increasing compulsory, as against voluntary, insurance plans. Bearing in mind that 60 per cent of American families, according to the Brookings Institution, have incomes of \$2,000 or less, let us continue our efforts to make this group self-supporting in health care through voluntary means by the medical profession. Medical Associates contribute to this possibility.

To assist in giving such service the needs for development in the various divisions of Medical Associates is indicated by the following data:

COMMITTEE REPORTS

Nursing.—Total number of nurses needed in
U. S.359,500
Number now in profession.....317,800
Additional number needed..... 41,700
In Michigan employment vacancies 5,407

Medical Technologists.—Only 575 in Michigan. The Registry of Medical Technologists finds it possible to fill practically none of the positions that come to their attention, because they have no registrants listed.

Medical Artists.—At the present time the demand for medical illustrators seems to be greater than the available supply.

Occupational and Physical Therapists.—Existing Vacancies:

Civilian	261
Veterans Adm.	550
Navy	32

843

Mental Health Associates.—The problem of mental health care has become so overwhelming that definite methods of action have not yet been formulated from the standpoint of Medical Associates training. This is an educational task without present possible means of fulfillment.

Medical Social Workers.—There is a much greater demand for Medical Social Workers than can be filled.

Hospital Dietitians.—At present there are 452 hospital positions open in the United States; 6 per cent of these are in Michigan—without any possibility at present of being filled. This is a decided educational concern of the House of Delegates of the Michigan State Medical Society.

Dental Associates.—

1. Dental Hygienists: 133 registered in Michigan; the demand exceeds the number of graduates.
2. Dental Assistants: 47.3 per cent of dentists employ assistants.
3. Dental Laboratory Technicians: Oversupply of trainees.

Leading dentists of Michigan estimated one year ago that through Dental Associates the distribution of dental care could be increased by 65 per cent. To be conservative, the Commission on Health Care gave an estimate of 50 per cent. It is of interest that without knowledge of either group knowing of this consideration given to the subject by the other, that the Brookings Institution estimated dentistry could be increased through Medical Associates by 62 per cent. And yet with 3,300 dentists in Michigan, there are only 133 Dental Hygienists in Michigan, and less than 50 per cent of the dentists have Assistants.

Medical Secretaries.—There is a constant demand for highly trained medical secretaries, and very little opportunity is provided for adequate training in Michigan.

Medical Record Librarians.—There are 1,936 registered record librarians in the United States to serve 6,500 approved hospitals.

Ophthalmic Associates.—This is another field in which the demand has increased beyond any specific organizational or educational development. Much of the work in this specialty is highly technical and can be done by trained technicians.

X-Ray Technicians.—Good x-ray technicians are always in demand; there is a shortage in communities with small hospitals.

Public Health Associates.—

1. Sanitary Engineer—Moderate need.
2. Industrial Hygienist—Critical need.
3. Health Inspector—most positions in Civil Service, but increasing number open in dairies, large food canners and packers.
4. Veterinarian—urgent need for all branches of Veterinary Medicine.
5. Vital Statistician—moderate need.
6. Public Health Educator—urgent need.

Hospital Administrators.—Shortage of trained hospital administrators in the United States. Approximately 200 hospitals in Michigan employ trained administrators. There is a turnover of approximately five to ten each year.

In the divisions of Ophthalmic Associates, Orthopedic Associates, and Associates to the Dermatologist, no courses are now offered except for Orthopedic Technicians and Chiropodists. Questionnaires sent out by the Commission indicate majorities of Ophthalmologists, Dermatologists, and Orthopedic surgeons voting for increased personnel in these divisions.

A report on the Medical Associates program has been made before the Michigan College Association, May 4, and the Department of Public Instruction through which it is receiving definite co-operation. Presentation of the program is received with much enthusiasm by young people in consideration of their entering these various fields, as evidenced by our first sampling of high schools in an address to Redford Union High School, June 3.

We believe it would be of definite value to all concerned were it possible to have a film made covering this subject, for use in motion picture theaters, high schools and colleges and through the Women's Auxiliary groups and before other interested organizations.

We recommend that the State Society give consideration through its Orthopedic Section to the immediate setting up of courses for Orthopedic Hygienists, or in lieu of this, to recommending the advising of Chiropody being developed to a university status.

The Department of Public Relations has done effective work this year in the development of Medical Associates. Its task in this regard is but partly accomplished. We recommend the continuance of the Commission on Health Care for the ensuing year. It becomes increasingly apparent that one of the best methods of dealing with irregular practice is to have all therapeutic procedures worthy to be classified as therapeutic, to be developed and given by the medical and dental professions.

Respectfully submitted,

R. H. PINO, M.D., Chairman
H. A. KEMP, M.D.
B. R. CORBUS, M.D.
F. H. DRUMMOND, M.D.
H. M. POLLARD, M.D.

ANNUAL REPORT OF CANCER CONTROL COMMITTEE, 1947-48

The Cancer Control Committee as a whole held two meetings during the year: one in November, 1947, in Ann Arbor, and one in March, 1948, in Lansing. However, the three subcommittees, into which the committee membership has been divided in order to facilitate consideration of various problems falling within the scope of the Committee's activities, held meetings to consider matters referred to them by the whole committee.

The subcommittee on Education held two meetings and continued its study of professional education. On request, the editor of THE JOURNAL, Michigan State Medical Society, kindly placed a page of each issue at the disposal of the Cancer Control Committee for bringing to the physicians of Michigan pertinent information about the cancer problem. This page is entitled "Cancer Comment" and appeared for the first time in the April, 1948, issue of THE JOURNAL.

The Cancer Control Committee has taken active steps to continue the *Michigan Cancer Bulletin* for an indefinite period. Volume II will be written entirely by Michigan doctors, twenty physicians having accepted the committee's invitation to prepare articles on cancer of various organs. Many of these articles are now in the printer's hands and their distribution at monthly intervals will begin later in the year.

The Michigan Cancer Program, a brochure discussing

COMMITTEE REPORTS

the cancer problem in Michigan and means being taken to cope with it, was distributed to members of the Michigan State Medical Society, the Michigan Pharmaceutical Association, and the Legislature; also to all local health departments and organizations of the American Cancer Society. Plans are under way for its distribution to dentists, nurses and other interested groups. Twenty-five thousand copies have been distributed.

Upon the suggestion of this committee, the School of Public Health, University of Michigan, in January, 1948, held a three-day Cancer Institute for health officers and supervising public health nurses. Speakers of national prominence appeared on the program. This Institute was the first of its kind held in a school of public health in this country and drew an attendance of more than 150, the majority of whom were Michigan health workers. This meeting was followed by a seven-day refresher course in cancer nursing for twenty-one public health nurses. The course for nurses was repeated during the summer session.

Each county medical society has again been urged to appoint a cancer committee and to hold a cancer-teaching day or at least to devote one meeting to cancer subjects each year. Cancer teaching days have been held in Flint, Grand Rapids, Kalamazoo, Battle Creek, Hastings, Niles, and St. Joseph-Benton Harbor. The postgraduate team visiting the Upper Peninsula in May, 1948, devoted one session at each meeting to a discussion of problems of malignancy. In addition, a special meeting of physicians and dentists in Dickinson and Iron counties was devoted to cancer. Similar meetings have been held in Hillsdale, Barry, and Clinton counties.

While the Ways and Means subcommittee held no meeting during the year, it did gather pertinent information regarding the source and amount of funds available for cancer control work in the State. So far as could be determined, the funds of local organizations of the American Cancer Society are being spent in a constructive manner as the needs of their communities dictate.

The Fact-Finding subcommittee held one meeting during the year at which time the study outline used in the pilot surveys noted in last year's committee report was revised in keeping with experience gained in its use in the field. This outline is now available to any local medical group wishing to make a similar survey of its own cancer problem.

The Fact-Finding subcommittee also has developed an outline for the study and evaluation of cancer detection centers in Michigan. It is proposed to make this survey within the next few months out of which it is expected that some general principles governing the conduct of these organizations may develop.

Cancer detection centers are now reported in operation in Bay City, Battle Creek, Detroit, Grand Rapids, Hastings, Lansing, Marquette, Menominee, Pontiac and Saginaw. Conferences regarding cancer detection centers have been held with groups of physicians in Howell, Niles, Ironwood, Marquette and Saginaw. Several other local medical and lay groups have inquired about providing such facilities for their communities.

As a result of the study of cancer incidence and prevalence made in Hillsdale County last year, the medical society of that county has set up the "Hillsdale Plan" for the detection of cancer. Each physician has offered to the women of that county, forty years of age and older, an examination of their skin, breasts, cervix and rectum; the examination to be made in the doctor's offices during hours and for their regular fee. The county health department keeps a master file of all examinees. The examinations are to be repeated semiannually.

While this plan has been in operation only since January 1, 1948, it is proving acceptable to both physicians and laymen and is attracting attention throughout Michigan and surrounding states. Far more periodic examinations are being made than heretofore and as high a percentage of malignancy is being found as is reported from special cancer detection centers in other parts of

the country. The physicians of Hillsdale County are demonstrating that it is practicable to make every physician's office a cancer detection center.

On request of the Cancer Control Committee, the Michigan Pathological Society appointed a committee to study and evaluate the cell smear (Papanicolou) test for early cancer.

The secretary's office has answered inquiries about the Michigan cancer program from many parts of the country. Assistance has also been given to several local groups within the state. Insofar as possible, all such requests have been complied with. Members of the Cancer Control Committee have rendered valuable service to the cancer work in their own communities.

Support of the committee's work by the co-operating organizations, the Michigan Division, American Cancer Society, the Southeastern Michigan Division, American Cancer Society, and the Michigan Department of Health, also a substantial contribution from the Kellogg Foundation, is gratefully acknowledged.

The Cancer Control Committee urges increased emphasis in the attack on local cancer problems by professional and lay groups most concerned. It plans to continue the present program and to put special emphasis on making every physician's office a cancer detection center.

Respectfully submitted,

N. F. MILLER, M.D., *Chairman*
P. L. LEDWIDGE, M.D., *Ex-officio*
F. A. COLLIER, M.D., *Advisor*
F. L. RECTOR, M.D., *Secretary*
J. K. ALTLAND, M.D.
MAX BURNELL, M.D.
D. C. BURNS, M.D.
L. A. CAMPBELL, M.D.
E. I. CARR, M.D.
A. E. HAMMOND, M.D.
EUGENE HAND, M.D.
L. E. HOLLY, M.D.
A. A. HUMPHREY, M.D.
W. A. HYLAND, M.D.
C. H. KEENE, M.D.
H. F. MATTSON, M.D.
A. B. MCGRAW, M.D.
H. L. MILLER, M.D.
H. M. NELSON, M.D.
C. A. PAYNE, M.D.
H. M. POLLARD, M.D.
H. W. PORTER, M.D.
H. R. PRENTICE, M.D.
W. W. SAWYER, M.D.
H. L. SIGLER, M.D.
H. L. SMITH, M.D.
H. J. VANDEN BERG, M.D.

ANNUAL REPORT OF PUBLIC RELATIONS COMMITTEE, 1947-48

The Public Relations Committee has grown to a Committee of thirty-nine members, representing each of the Michigan State Medical Society Councilor Districts, and providing personnel for the Media Committees whose reports follow this review of the over-all activity of the parent committee.

Personal Contact

Personal contact with lay organizations, communication media and personnel, medical organizations, health and educational organizations, important individuals in the business and professional world, governmental workers and policy makers cannot be spelled out in specific terms. Suffice it to say that this year has seen a definite increase in personal contact activity on the part of those who are interested in the public relations of organized medicine.

COMMITTEE REPORTS

Co-Planning

In regard to the thinking which has determined the policy and activity of Michigan State Medical Society Public Relations, it must be reported that a tremendous amount of time and thought has been placed on this subject. This is true not only of doctors and their employees. In addition, the friendly counsel of hundreds of people in ancillary organizations, in the fields of communication, advertising, education, and others, has been encouraged with excellent results. This is epitomized by the action following the first annual Rural Health Conference held at East Lansing on September 18-19, 1947. The net result of the Conference was to place the medical profession in a position of leadership in rural health activities with a progressive plan which was taken up and followed with enthusiasm by the thirty organizations who co-sponsored the Conference. This has developed both co-operation from and acceptance of Medical Society information by the organizations themselves and by the various newspapers and magazines. This is most gratifying and has done much to place the Michigan State Medical Society in a favorable light with leaders and molders of public opinion.

Indications of Progress

Scrap books are not proof of good Public Relations, but they are indicative of interest and support. The clippings and other reports in the possession of the Michigan State Medical Society indicate that during the past two years more favorable words have been written, spoken and published regarding the Michigan State Medical Society and its membership than in the previous fifteen years added together.

It is important to note that the activity of several other important state medical societies has not only been patterned after, but has actually used the output of Michigan Public Relations to good effect and with gratitude.

Public Speaking

Arrangements have been made throughout the year for addresses to be given to various organizations outside of the medical profession such as Service Clubs, Womens Clubs, Educational Associations, Rural groups, et cetera. For these, the Public Relations Committee has either provided the speakers from its membership or obtained satisfactory representatives.

Displays

Displays of a Public Relations nature at both the Annual Session of the Michigan State Medical Society and the American Medical Association have been arranged. In addition, these exhibits are being placed before the public through County Medical Societies and other organizations.

Awards

Awards have been given to the W. K. Kellogg Foundation; Emory W. Morris, Battle Creek; Henry Vaughan, Ann Arbor; Donald E. Johnson, Flint; for outstanding health service, and a new award, "Michigan's Foremost Family Physician," was presented to T. E. DeGurse, M.D., Marine City. These awards have, in each case, served to honor the recipient and keep the Michigan State Medical Society in a position of leadership.

Co-operation with Intra-Organizational Groups

A major part of any public relations effort is to correlate the work of various other committees when their work deals directly with the public, since this work thereby becomes a very definite part of the Public Relations program. Below are some indications of the work done in this regard.

Commission on Health Care:—Activity in connection with this Commission has amounted to aid in the development of the brochure on Medical Associates, prepa-

ration of visual and auditory aids on the program, contact with schools and school organizations—colleges and college organizations, organization of a plan for dissemination of information re the program, and investigation of the need involved.

Committee on Rural Medical Service:—The Public Relations Committee has worked closely with this Committee in the development and production of the first annual Michigan Rural Health Conference and in the preparations for the second annual Rural Health Conference.

Health Survey Advisory Committee:—The Michigan Health Survey is being developed by this Committee with the co-operation of the Public Relations Committee so that, in addition to the obtaining of medical needs data, information will be found on attitudes and opinions of interest to the MSMS from the standpoint of public relations. The survey is state-wide in nature and is based on the master sampling procedure developed by Iowa State University. It is being conducted by the Social Research Service of Michigan State College.

Committee on Rheumatic Fever Control:—Publicity in newspapers and magazines of a most effective and widespread variety has been given this Committee as a part of the public relations program. The Metropolitan Life Insurance film, "Be Your Age," was credited to MSMS and arrangements made for 90,000 copies of the pamphlet "Your Child is Safer in Michigan" to be printed and disseminated with the showing of the picture in moving picture theaters.

Committee on Scientific Radio:—Arrangements were made through the Committee to utilize speakers from localities outside of Ann Arbor and to place the program "Medical Talks" on additional radio stations.

Legislative Committee:—The Public Relations Committee has acted with this Committee to bring a fuller knowledge of the principles and practices of the MSMS membership to the members of the Legislature.

Committee on Awards:—The work of the Public Relations Committee has been efficacious in causing widespread recognition to be given to those who have been honored by the Committee on Awards.

Woman's Auxiliary:—Liaison in public relations activity, was established with the Woman's Auxiliary to the end that several meetings of women's groups were held presenting speakers on medical socio-economic subjects this year and a very definite and complete program outlined for 1948-49.

Michigan Foundation for Medical and Health Education, Inc.:—This Foundation, in addition to their other activities, has seen fit to join with the MSMS in co-sponsoring the Michigan Health Survey, the Michigan Rural Health Conference, and the showing of the motion picture "Be Your Age." They have also set up a Loan Fund for the Encouragement of Practice in Rural Areas. These activities have tied in closely with the public relations program and work of the Public Relations Committee.

National Organizations:—Attendance, participation, and co-operation in programs of the American Medical Association, the National Conference on Medical Service, the National Rural Health Conference, and national specialty groups have been carried out to the fullest extent.

Advice and Assistance in Public Relations

The work of the Public Relations office has increased to the extent this year that an additional assistant, H. W. Corsette, was given to Hugh W. Brennenman, Public Relations Counsel, to aid him in forwarding and implementing the desires of the Committee.

Wallace-Lindeman, Inc., of Grand Rapids, has continued to serve as advertising counsel with excellent advice and assistance.

Jam Handy Organization in Detroit has served as consultant in visual and auditory aids as well as producing the MSMS moving picture.

COMMITTEE REPORTS

Two years ago a long-time Public Relations Program was designed, and the Program this year has merited the confidence of the House of Delegates and The Council by developing effectively in every phase of Public Relations work so that the effort of the Society has become well organized, accurately directed and enthusiastically developed.

The instructions of the House of Delegates have been carried out, and all actions of the Public Relations Committee have been thoroughly reviewed by the Executive Committee of The Council, which has authorized the expenditure of funds only after exhaustive review.

Respectfully submitted,

Public Relations Committee

L. W. HULL, M.D., <i>Chairman</i>	J. E. LIVESAY, M.D.
G. L. CANDLER, M.D.	J. J. McCANN, M.D.
C. T. AITKEN, M.D.	H. J. MEIER, M.D.
E. W. BLANCHARD, M.D.	E. B. MILLER, M.D.
A. F. BLIESMER, M.D.	F. J. O'DONNELL, M.D.
A. S. BRUNK, M.D.	E. S. OLDHAM, M.D.
J. S. DeTAR, M.D.	E. A. OSIUS, M.D.
DOUGLAS DONALD, M.D.	C. A. PAYNE, M.D.
L. FERNALD FOSTER, M.D.	F. R. REED, M.D.
N. J. FRENN, M.D.	E. S. RHIND, M.D.
W. G. GAMBLE, JR. M.D.	W. Z. RUNDLES, M.D.
W. J. HERRINGTON, M.D.	R. F. SALOT, M.D.
L. T. HENDERSON, M.D.	G. B. SALTONSTALL, M.D.
L. E. HOLLY, M.D.	A. E. SCHILLER, M.D.
KENNETH JOHNSON, M.D.	A. H. STEELE, M.D.
W. S. JONES, M.D.	R. W. TEED, M.D.
C. R. KEYPORT, M.D.	ARCH WALLS, M.D.
J. S. LAMBIE, M.D.	C. L. WESTON, M.D.
J. J. LIGHTBODY, M.D.	D. B. WILEY, M.D.
	G. A. ZINDLER, M.D.

ANNUAL REPORT OF COMMITTEE ON CINEMA, 1947-48

The Committee on Cinema met on January 24, April 23, and again on May 10, to draw up final plans for integrating motion pictures with the master public relations plan of the MSMS. The following progress has been made:

1. The Michigan State Medical Society motion picture was prepared under the direction of this committee. The picture stresses the greater life expectancy of a child born today as compared to that of one born fifty years ago. It shows how because of modern immunization procedures and the swift advance of medical science the average person today may look forward to a life expectancy of sixty-five plus. It emphasizes the work that the MSMS has done in controlling disease.

The picture, filmed by the Jam Handy Organization in Detroit, runs ten minutes in length and will be distributed through the motion picture theaters of Michigan. It is anticipated that over a million persons will see it on screen.

2. Arrangements were made whereby the Metropolitan Life Insurance Company's ten-minute motion picture "Be Your Age" was shown in Michigan theaters with a trailer outlining the Rheumatic Fever Control Centers; namely, the Michigan State Medical Society, The Michigan Foundation for Medical and Health Education, the Michigan Society for Crippled Children and Adults, as well as the State Department of Health.

Over 90,000 copies of the pamphlet "Your Child is Safer in Michigan" were distributed to theater audiences at the time this picture was shown in Michigan theaters.

Respectfully submitted,

ARCH WALLS, M.D., *Chairman*
A. E. SCHILLER, M.D.
E. A. OSIUS, M.D.
J. S. DeTAR, M.D.
R. F. SALOT, M.D.

ANNUAL REPORT OF COMMITTEE ON PUBLIC RELATIONS PUBLICATIONS, 1947-48

A meeting of the Committee on Public Relations Publications was held on January 24. The publications put out in 1947 were reviewed, and the matter of future publications discussed. Following is a report on the activities of the committee:

1. The Medical Associates brochure was completed, published, and prepared for distribution to schools and colleges through the MSMS and the Woman's Auxiliary of the MSMS. This brochure has been developed for the purpose of stimulating the recruitment of young people into fields allied with health and medicine.

Each page in the brochure is devoted to a different Medical Associate Field. These pages are introduced with pictures showing the particular associate in his professional habitat. The accompanying article is designed to attract the interest of the high school or college student to that particular occupation. Detailed information on each of the professions outlined throughout the book is contained in a large chart at the back of the brochure.

2. Medical Plan for Michigan, a publication outlining the work of the Michigan State Medical Society, has been revised and prepared for distribution. This publication is designed to give a comprehensive over-all description of the various health and medical activities carried out by the Michigan State Medical Society at the present time.

3. A brochure reporting the activities of the first Michigan Rural Health Conference was published along with a supplementary report which outlined the steps taken to implement the resolutions which were passed at the Conference. Copies were distributed throughout Michigan, and 1,000 copies were distributed at the AMA Convention held in Chicago in June.

4. Feature articles were prepared for each issue of THE JOURNAL. These articles were then reprinted and mailed to governmental officials and representatives and to officers and public relations committee chairmen of the county societies. By this means, interested parties are kept posted on the latest socio-economic activities of organized medicine in Michigan.

5. A new monthly bulletin, PR BYLINES, was sent to all members of the MSMS. PR BYLINES is a service which the Public Relations Committee feels is needed as a supplement to THE JOURNAL, which must, of necessity, confine itself to more weighty and scientific discourse.

6. A public relations column "PR in Practice" is published in each issue of THE JOURNAL. This column is designed to give a broad over-all picture of the month's public relations activities.

Respectfully submitted,

KENNETH JOHNSON, M.D., *Chairman*
A. F. BLIESMER, M.D.
L. FERNALD FOSTER, M.D.
J. E. LIVESAY, M.D.
L. T. HENDERSON, M.D.

ANNUAL REPORT OF COMMITTEE ON RADIO, 1947-48

The Committee on Radio met on January 24 and formulated plans and policies for utilizing radio time to the best possible advantage. Following is a report of the activities which were planned and carried out:

1. The "Tell Me, Doctor" program was continued this year and is now being broadcast over the following twenty-two Michigan stations: WELL Battle Creek, WHLS Port Huron, WJIM Lansing, CKLW Detroit, WKZO Kalamazoo, WATT Cadillac, WMIQ Iron Mountain, WLAV Grand Rapids, WDMJ Marquette, WIBM Jackson, WTCM Traverse City, WATZ Alpena, WHDF Calumet, WMPC Lapeer, WMBN Petoskey, WMRP Flint, WHFB Benton Harbor, WOAP Owosso,

COMMITTEE REPORTS

WJPD Ishpeming, WBCM Bay City, WDBC Escanaba, and WHRV Ann Arbor. This makes a total of 5,720 separate individual broadcasts being heard in a single year in Michigan: Total sixty-minute radio hours: 477.

This program is also being used regularly over four stations in Virginia by the Medical Society of Virginia. The stations over which it is heard are WINC Winchester, WLVA Lynchburg, WBTM Danville, and WOPI Bristol. The Kanawha County Medical Society presents the program over WCHS Charleston, W. Virginia, and it is also broadcast by the Oklahoma State Medical Society over two major stations.

2. The University of Michigan program "Medical Talks" is broadcast in co-operation with the Michigan State Medical Society. It consists of thirty-nine fifteen-minute transcribed broadcasts by doctors of medicine and is heard over nine stations for a total of 351 separate individual broadcasts. (See report of Scientific Radio Committee).

3. Special broadcasts were presented from time to time such as the seven broadcasts during the MSMS Annual Session, special broadcasts at the Michigan Rural Health Conference, those presented on immunization over station WKAR E. Lansing, and others.

4. News releases are routinely used by radio stations at the same time they are released to newspapers.

5. *Radio Use by Local Organizations*:—Several county medical societies sponsor or approve local radio programs. Among them are:

Wayne County Medical Society: Edits script "To Your Industrial Health" for the UAW-CIO Health Institute which is heard over WWJ Detroit.

Muskegon County Medical Society: Presents a fifteen-minute program "Why do You Worry" each Tuesday over Station WKBZ.

Washtenaw County Medical Society: Uses thirteen AMA transcriptions on nutrition over WPAG Ann Arbor. In addition this society co-operates with Beyer Hospital in the presentation of a weekly program with general practitioners giving fifteen-minute talks.

Ingham County Medical Society: Utilizes radio in the releasing of news items for PR functions. The society also co-operates in a weekly fifteen-minute program sponsored by a local drug firm.

Berrien County Medical Society: A local MSMS doctor of medicine gives a weekly ten-minute talk on health and medicine over WHFB Benton Harbor, carried as a sustaining program by the station.

Bay County and Gogebic County Medical Societies: Use local radio facilities for special programs.

Respectfully submitted,

C. A. PAYNE, M.D., *Chairman*
C. L. CANDLER, M.D.
W. G. GAMBLE, JR., M.D.
R. W. TEED, M.D.
W. J. HERRINGTON, M.D.

ANNUAL REPORT OF COMMITTEE ON NEWSPAPERS, 1947-48

The Committee on Newspapers held a meeting on January 24 to make plans for the part which newspapers would play in implementing the over-all public relations program. As a result of this meeting the following steps have been taken:

1. *Advertisements*:—Four ads were placed in forty-nine daily newspapers and fifty-six weekly newspapers in Michigan, as well as in the *Michigan Farmer* magazine. This makes a total of 426 ads (with a total reading circulation of approximately 1,750,000) which were seen by the people of Michigan during the course of the year.

2. *Newspapers*:—Advance newspaper releases were sent to all newspapers in Michigan on the Michigan Postgraduate Clinical Institute, the Michigan Rural Health Conference, and the MSMS Annual Session, and received universal acceptance. Special releases on all

speakers at these meetings were sent out to local newspapers. In addition, releases were distributed on miscellaneous unscheduled events such as addresses before groups by individual physicians, awards and presentations to those honored by the MSMS, and special news features which were felt to be of interest to the general public. The naming of Michigan's Foremost Family Physician received particular attention.

3. *Feature Releases*:—Feature articles with pictures were written and released through the *Detroit News*, *Detroit Times*, *Grand Rapids Herald*, *Grand Rapids Press*, *Michigan Times*, *Kalamazoo Gazette*, *Battle Creek Enquirer and News*, *Bay City Times*, *Chicago Daily Tribune*, *New York Times*, and others. The *Michigan Farmer*, *Country Gentleman*, and *Science Illustrated* have carried special features.

Special releases such as the one on the Rheumatic Fever Centers (three columns with pictures) were sent out in mat form to all newspapers. These articles appeared in an average of 195 Michigan papers.

4. *Health News Column*:—The Health News Column continues in popularity. Written to appeal to the lay reader, this column features the latest developments in the health and medical fields. Sent out weekly in mat form, it is carried regularly in 253 Michigan newspapers.

Respectfully submitted,

C. L. WESTON, M.D., *Chairman*
J. J. LIGHTBODY, M.D.
H. J. MEIR, M.D.
F. J. O'DONNELL, M.D.
G. T. AITKEN, M.D.

ANNUAL REPORT OF COMMITTEE ON EDUCATION PROGRAMS IN SCHOOLS AND UNIVERSITIES, 1947-48

At a meeting of the Committee on Education Programs in Schools and Universities held in Detroit on January 24, needs and proposed solutions for educational problems were presented and discussed. Following is the action taken on the suggestions of the committee:

1. Progress has been made on the Sex Education Program. Sixteen scripts have been completed, and are being transcribed on fifteen-minute records. Eleven minutes of each record are devoted to the dramatization of a specific phase of sex education and four minutes to a scientific explanation of the subject dramatized.

The transcriptions are being recorded by Wayne University, and will be tried out in typical high schools this fall. If they prove acceptable, they will be offered to all high schools in the state.

An explanatory teacher's guide has been prepared which will accompany the transcriptions. This will make it unnecessary for an M.D. to be in the classroom to present the subjects, as has previously been the case, yet the service will be one that is offered by doctors of medicine.

Respectfully submitted,

D. B. WILEY, M.D., *Chairman*
E. B. MILLER, M.D.
J. S. LAMBIE, M.D.
J. J. McCANN, M.D.
A. H. STEELE, M.D.

ANNUAL REPORT OF COMMITTEE ON HEALTH EDUCATION CONFERENCE, 1947-48

This Committee met on January 24 making several recommendations adopted by the MSMS Public Relations Committee. However, it has no activity to report since the function of the committee as per its original purpose no longer exists.

Respectfully submitted,

W. Z. RUNDLES, M.D., *Chairman*
W. S. JONES, M.D.
L. E. HOLLY, M.D.
C. R. KEYPORT, M.D.
N. J. FRENCH, M.D.

MICHIGAN STATE MEDICAL SOCIETY

Technical Exhibits

Detroit, September 22-24, 1948

Abbott Laboratories North Chicago, Illinois

Booth No. 31

You will be interested in viewing the brand new display prepared for this meeting. A wide variety of research specialties will be on view and your questions will be welcomed by the Abbott professional representatives in attendance. Make a visit to the Abbott booth a *Must* on your program.

A. S. Aloe Company St. Louis, Missouri

Booth No. 34

Representatives of the A. S. Aloe Company will welcome their friends at Booth No. 34 where they will have on display a representative cross section of a complete line of Surgical, Hospital, and Laboratory equipment and supplies. Featured will be a complete line of government surplus instruments available at the present time—especially selected, fully certified instruments at approximately one-half the regular cost.

Ames Company, Inc. Elkhart, Indiana

Booth No. 13

Ames Company representatives will be glad to discuss Decholin, the standard hydrocholeretic agent for the treatment of biliary tract diseases; and Decholin Sodium, pure sodium dehydrocholate.

They will be demonstrating Clinitest and Hematest—simplified tests for the detection of urine-sugar and occult blood.

Armour Laboratories Chicago, Illinois

Booth No. 12

The Armour Laboratories, a pioneer in the field of endocrinology, will welcome members of the Michigan State Medical Society to visit the Armour exhibit in Booth No. 12. If you have not received copies of Armour booklets on

"The Thyroid Gland"
"Function and Malfunction of the
Biliary System" and
"Armour Atlas of Hematology"

you may secure them at the Armour booth.

Ayerst, McKenna & Harrison, Ltd. New York, New York

Booth No. 11

"PREMARIN" (Estrogenic Substances—water-soluble)—a highly effective and well-tolerated preparation of naturally occurring, orally active, conjugated estrogens (equine). The potency of "Premarin" is expressed in terms of its principal estrogen, sodium estrone sulfate.

"Premarin" is provided in four potencies of tablets and also in liquid form.

Baker Laboratories Cleveland, Ohio

Booth No. 9

Baker's Modified Milk, liquid or powder, may be used interchangeably from birth to the end of the bottle-feeding period. An adjusted protein, two carbohydrates, a modified fat, vitamins, soluble mineral salts and iron, coupled with simplicity of preparation and low cost, provide for complete nutrition and insure co-operation in the home.

Bard-Parker Company, Inc. Danbury, Connecticut

Booth No. 41

Bard-Parker RIB-BACK surgical knife blades; surgical knife handles, including long handles for deep surgery, laboratory handles, and hysterectomy and eye handles; Bard-Parker Germicide—a sporicidal solution; instrument-sterilizing containers; *Chlorophenyl*, an ideal office instrument disinfectant; hematological cases for obtaining bedside blood samples and pipettes.

Barry Laboratories, Inc. Detroit, Michigan

Booth No. 23

The Barry Laboratories will display for the consideration of their many physician friends new and modern diagnostic allergy skin-testing sets. There will be assortments for all specialties, including a special assortment for the general practitioner. In addition, the allergy division will present a personalized treatment method as used for the specific desensitization of allergy patients.

The Biological Division of the Barry Laboratories will present a complete line of sterile injectables in multiple dose and ampule vials; including a high potency ready mixed B-Complex solution with a long-term potency guarantee. The technical representative of the Barry Laboratories will be on hand to assist all physicians inquiring about their products and services.

The Borden Company New York, New York

Booth No. 48



Your attention is invited to PROTOLAC, a new especially formulated blend of intact proteins and high protein products derived from animal and vegetable sources. PROTOLAC is supplemented with choline and the amino acid cystine. PROTOLAC is indicated in high protein therapy in conditions requiring increased dietary protein of optimum nutritional value.

Likewise exhibited will be the long established Borden products for infant feeding: BIOLAC, DRYCO, MULL-SOY, MERRELL-SOULE SPECIAL MILKS, general purpose KLIM, and BETA LACTOSE.

Brewer & Company, Inc. Worcester, Massachusetts

Booth No. 68

This exhibit consists of specialties, centering around Thesodate, the original enteric-coated tablet of Theobromine Sodium Acetate and Luasmin, a combination of Theophylline Sodium Acetate, Phenobarbital and Ephedrine for the treatment of asthma. Also, Brewer Capsules and Ampuls, other specialties including Soduxin (Sodium Succinate—Brewer) and standard pharmaceuticals manufactured by Brewer & Company, Inc., including a complete line of Vitamin preparations for internal use and injection. Gel-ets, the newest mode in oral vitamin therapy, and Brewer's newest item, Amchlor, a one-gram enteric coated tablet of Ammonium Chloride, are also featured.

TECHNICAL EXHIBITS

Brooks Appliance Company Chicago, Illinois

Booth No. 18

The BROOKS APPLIANCE COMPANY will have on display a complete line of Bandages, Proctological Instruments, Syringes, Needles and Elastic Stockings. W. C. Ayer will have charge of the exhibit and will describe in detail the technique of applying the new combination pressure bandages, Contura plus Pressoplast, which is used in treating Phlebitis, Leg Ulcers and Osteo-arthritis of the knee joints.

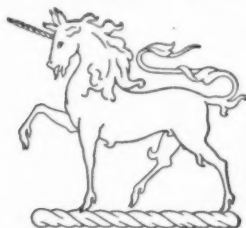
Burdick Corporation Milton, Wisconsin

Booth No. 16

The Burdick Corporation will feature their new F.C.C. approved Diathermy Unit, Model X 85. They will also show their complete line of Infra-red and Ultra-violet Lamps, Muscle Stimulator, and the Rhythmic Constrictor for treating peripheral vascular conditions.

Burroughs Wellcome & Co. (U.S.A.) Inc. New York, New York

Booth No. 50



Among significant products featured will be WELLCOME GLOBIN INSULIN, which provides an action which is timed to be more suitable for the average diabetic; DEXIN brand High Dextrin Carbohydrate, in which the nonfermentable proportion predominates; DIGOXIN, the pure, stable, crystalline glycoside which offers predictable digitalization; and METHEDRINE, a recent sympathomimetic drug of wide therapeutic application.

Camel Cigarettes New York, New York

Booth Nos. 38, 39

CAMEL Cigarettes will present a dramatic full-color review of their recent medical research on smoking, as well as the details of the nation-wide survey showing that "More Doctors Smoke Camels Than Any Other Cigarette." Another panel will illustrate the absorption of nicotine in the respiratory tract. Representatives will be present.

Cameron Heartometer Company Chicago, Illinois

Booth No. 54

See the improved Heartometer, a scientific precision instrument for accurately recording systolic and diastolic blood pressures, also furnishing a permanent graphic record of the pulse rate, disturbances of the rhythm, myocardial response, the action of the valve, as well as peripheral vascular circulation. The Heartometer clearly reveals heart disturbances in both early and advanced stages, and is of great value in checking the progress of medication and treatments.

Cameron Surgical Specialty Company Chicago, Illinois

Booth No. 49

Have a demonstration of the Cameron Cauterodynes and Cauteradios for electro-surgery, electro-cauterization and electro-coagulation; Telescopic Bronchoscopes—Esophagoscopes—Laryngoscopes; Coagulair-Sigmoidoscope; Electro-Diagnostic Lamps and Instrument Sets; Radiolucent Cannula; the new Flexible Gastrosopes with treated and coated lenses; Flexible Esophagoscope; Mirror Headlites; Binocular Spectacle Loupe; Magniscope and other specialties.

Carnation Company Los Angeles, California

Booth No. 22

You are invited to visit Booth No. 22 where you will see an attractive display on Carnation Evaporated Milk—"the milk every doctor knows." Some valuable information on the use of this milk for infant feeding, child feeding, and general diet will be presented and

the method by which Carnation is generously fortified with pure crystalline Vitamin D-400 U.S.P. units per reconstituted quart will be explained. Interesting literature will also be available for distribution.

Ciba Pharmaceutical Products, Inc. Summit, New Jersey

Booth No. 35

The Ciba exhibit of "Economical Hormone Therapy" will feature METANDREN Linguets, the most potent oral androgen in tablets, designed for absorption through sublingual mucosa; LUTOCYLOL Linguets, orally effective progestogen especially designed for sublingual absorption; and ETHINYL ESTRADIOL, the most potent oral estrogen. Representatives in attendance will gladly furnish literature and answer questions about these and other Ciba products.

Davis & Geck, Inc. Brooklyn, New York

Booth No. 59
plus Cinema Room

Davis & Geck, Inc., manufacturers of sterile surgical sutures will present a program of films on surgery in the Cinema Room adjoining Booth No. 59. These films, selected from the D & G Surgical Film Library, represent twenty years of research and development in the field of visual education as applied to surgical technique. The Library, which contains films on every approved phase of surgery, is constantly expanded to include new and improved operative procedures. Programs of films to be shown will be available at the booth.

Detroit Creamery Company Detroit, Michigan

Booth No. 78

The Detroit Creamery Company has no instruments to demonstrate, nor can they display their dairy products, but physicians are invited to stop at the booth displaying the red and white sign of SEALTEST which symbolizes Quality, through Laboratory Control.



Detroit X-Ray Sales Company Detroit, Michigan

Booth No. 75

Dictaphone Corporation Detroit, Michigan

Booth No. 77



"The Dictaphone Twins"—world's most popular electronic dictating and transcribing machines—record on reusable non-static cylinders, and for office use are unsurpassed in operating ease and economy.

The sensational new Dictaphone TIME-MASTER, a unique and comfortably portable dictating machine, makes permanent, voice-perfect recordings on mailable, filable plastic Memobelts.

Dietene Company Minneapolis, Minnesota

Booth No. 45

Visit the Dietene Company exhibit and discover that really palatable high protein diet supplement—MERITENE. Smell it—taste it—and be convinced.

Also see the personal type diet service that is available, without charge, to physicians. DIETENE Reducing Supplement and the 1,000 calorie Dietene Reducing Diet will also be on display.

Both MERITENE and DIETENE are Council-Accepted.

TECHNICAL EXHIBITS

Doho Chemical Corporation New York, New York

Booth No. 33

The makers of Auralgan are featuring, at this meeting, their new sulfa preparation Otosmosan, indicated in the treatment and control of chronic suppurative ears. Also, Mallon, Division of Doho, is introducing the new topical anesthesia, Rectalgan, for relief of pain and itching in hemorrhoids and pruritus. This new therapy enjoys many advantages over the outmoded rectal suppositories and ointments. Representatives will be happy to explain, in detail, the workings of these medications.

H. G. Fischer & Company Chicago, Illinois

Booth No. 42

In the booth of H. G. Fischer & Co. see new units of Fischer X-Ray and Electro-Surgical-Medical apparatus. Let us demonstrate applications of new F.C.C. Type Approved Diathermy units. Your visit will be welcome and appreciated.

C. B. Fleet Company, Inc. Lynchburg, Virginia

Booth No. 44

C. B. Fleet Co., Inc., cordially invites you to stop by Booth No. 44 for a short visit with Mr. James A. Reed, the representative who sees you in your office about once a year. Perhaps there is something about Phospho-Soda (Fleet), the pure, stable, aqueous concentrate of the two U.S.P. Sodium Phosphates, you would like to discuss with him.

General Electric X-Ray Corporation Detroit, Michigan

Booth No. 56

Gerber Products Company Fremont, Michigan

Booth No. 10

Hack Shoe Company Detroit, Michigan

Booth No. 3

The busy doctor's substitute for a detail call is a visit to Booth No. 3, where HACK SHOES for men, women and children will be on display as usual. Many out-of-town physicians and their wives utilize the occasion of the MSMS Detroit meetings to visit the Hack Shoe Company on the Fifth Floor of the Stroh Building for their personal fittings.

Hanovia Chemical & Mfg. Company Newark, New Jersey

Booth No. 26

A complete line of ultraviolet quartz lamps for official and general body radiation will be on display as well as Wood's black light for diagnostic work, Sollux Radiant Heat Lamps and Safe-T-Aire germicidal lamps for the destruction of air-borne bacteria. Competent and courteous representatives will welcome your visit.

J. F. Hartz Company Detroit, Michigan

Booth No. 43

The J. F. Hartz Company appreciates the opportunity of displaying at the Annual Michigan State Medical Society Convention, their line of Laboratory Controlled Pharmaceuticals, as well as the latest in physiotherapy machines, office equipment, surgical and diagnostic instruments.

Hoffmann-La Roche, Inc. Nutley, New Jersey

Booth No. 52



Roche will feature THEPHORIN, a different antihistamine which is not likely to cause drowsiness; PRESIDON, the mild new sedative-hypnotic which is not a barbiturate and does not cause "hangover;" and SYRUP SEDULON, a non-narcotic cough remedy especially useful for night cough.

Holland-Rantos Co., Inc. New York, New York

Booth No. 83

Representatives will be pleased to show you the new horseshoe shaped diaphragm for cystocele patients, a recent addition to the well-known line of KOROMEX contraceptive specialties. Stop by for a sample of NYLMERATE JELLY for the treatment of trichomoniasis.

G. A. Ingram Company Detroit, Michigan

Booth Nos. 14, 15

The G. A. Ingram Company of Detroit will exhibit a complete line of surgical instruments in both stainless steel and chrome, as well as all available electrical appliances. Their representatives will be more than pleased to have you call and obtain information on both new and old items.

A. Kuhlman & Company Detroit, Michigan

Booth No. 72

A. Kuhlman & Co. representatives would be pleased to have you call at their booth and inspect the latest design Hamilton wood furniture. They will demonstrate a new short wave machine, approved by the Federal Communications Commission, which features an entirely new method of application. Also on display will be a complete line of surgical instruments.

Lea & Febiger Philadelphia, Pennsylvania

Booth No. 71

You will find the Lea & Febiger Exhibit of particular interest because of such outstanding new books and new editions as Ormsby and Montgomery—DISEASES of the SKIN; Gray—ANATOMY of the HUMAN BODY; Frohman—BRIEF PSYCHOTHERAPY; Partipilo—SURGICAL TECHNIC and PRINCIPLES of OPERATIVE SURGERY; Spaeth—PRINCIPLES and PRACTICE of OPHTHALMIC SURGERY; Krinsky—BINOCULAR IMBALANCE; Goldberger—UNIPOLAR LEAD ELECTROCARDIOGRAPHY; Krfaines—THERAPY of the NEUROSES and PSYCHOSES; Burch and Reaser—PRIMER of CARDIOLOGY and many other books of practical help and guidance.

Lederle Laboratories Division New York, New York

Booth No. 58

You are cordially invited to visit our exhibit in Booth No. 58, where you will find representatives who are prepared to give you the latest information on Lederle products.

Liebel-Flarsheim Company Cincinnati, Ohio

Booth No. 8

The Liebel-Flarsheim Company cordially invites you to stop at Booth No. 8 for examination and demonstration of their latest model diathermy and Bovie electrosurgical equipment. Capable representatives will be on hand at all times to answer your questions about physical therapy and electrosurgical apparatus. We hope you will stop by so that we may become acquainted.

Eli Lilly & Company Indianapolis, Indiana

Booth No. 73

Featured at the Lilly exhibit will be new therapeutic developments. Many Lilly products are to be on display; representative literature will be available. Lilly medical service representatives are to be in attendance to aid visiting physicians in every way possible.

J. B. Lippincott Company Philadelphia, Pennsylvania

Booth No. 1

J. B. Lippincott Company presents an interesting and active exhibit of professional publishing. With the

TECHNICAL EXHIBITS

"pulse of practice" centering in an advisory editorial board of active clinicians who constantly review the field, current and coming trends in medicine and surgery are known continually. On the studied recommendations of these medical leaders, Lippincott Selected Professional Books are undertaken. It is upon their knowledge, too, of the outstanding work being done in general practice, as well as the specialties, that men making a very real contribution to medical progress are chosen to author the Lippincott books.

M & R Dietetic Laboratories, Inc. Booth No. 46
Columbus, Ohio

M & R Dietetic Laboratories, Inc., Booth No. 46, will display Similac, a food for infants deprived of human milk, either partially or entirely. Messrs. F. H. Behncke, L. A. MacDonald, R. L. Wilson, and D. O. Cox will appreciate the opportunity to discuss the merits and suggested application for both the normal and special feeding cases.

Maico Detroit Company Booth No. 70
Detroit, Michigan

Our display will consist of hearing aids and audiometers. The new type hearing aid is a small all-in-one instrument that is capable of amplifying the faintest sound 240,000 times. The new type Maico audiometer makes it possible for the first time to balance hearing so as to assist the doctor in a correct diagnosis of different type impairments.

Mead Johnson & Company Booth Nos. 28, 29
Evansville, Indiana

Amigen and Protolysate will be on display at the Mead Johnson Exhibit at your Michigan State Medical Society Meeting. Mead Johnson has pioneered the amino acid field commercially; the products have been described in more than one hundred and forty articles in the medical literature; this year they are available. Trained representatives will be at the Mead Exhibit to discuss details of the new amino acid products. Shown also will be Dextrin-Maltose, Pabulum Pabena, Oleum Percomorphum and the other Mead Products used in Infant Nutrition. Protinum, a new high-protein product, will be displayed. Also Lonalac for low-sodium diets.

Medical Arts Surgical Supply Company Booth No. 64
Grand Rapids, Michigan

The Medical Arts Surgical Supply Company of Grand Rapids will occupy space Number 64 where they will display the latest diagnostic medical equipment such as Beck-Lee electrocardiograms, Liebel-Flarsheim Physio Therapy units and Hamilton medical furniture.

They will be represented by George Klaver, Herb Jacobson, Marshall Koak, Henton Jones, Joe DeBoer, and Jack Corrigan, who invite you to stop in.

Medical Film Guild Booth No. 5
New York, New York

Medical Film Guild, through *Medical Films That Teach* presents a refresher course in fundamental medical problems. Each film subject is produced in the manner of a textbook, profusely illustrated, offering information comparable to that found in postgraduate courses as presented at our leading medical schools. These films review such subjects as Occupational Health Problems, Management of the Failing Heart, Hypothyroidism, Arterial Blood Pressure, The Major Neuralgias, A Clinic on Deafness, Cervicitis, Parkinson's Disease, Otitis Media in Pediatrics, Mastoiditis,

Sinusitis, Trichomoniasis and Moniliasis, and many others.

These films are available at no charge to intern groups, hospital staff conferences, limited nurses' groups, and to general medical meetings. This includes projection service at no charge and is arranged through grants for postgraduate instruction.

Medical Protective Company Booth No. 32
Fort Wayne, Indiana

We specialize. Ask The Medical Protective Company's representatives to explain how their Company meets the exacting requirements of adequate liability protection, which are peculiar to the Professional Liability field. Their Company has specialized in providing protection for professional men since 1899.

Merck & Company, Inc. Booth No. 21
Rahway, New Jersey

Merck presents Neo-Antergan, a new effective antithistaminic agent for symptomatic relief in the oral treatment of certain allergic states including: hay fever, vasomotor rhinitis, urticaria, angioneurotic edema, and allergic drug reactions including those due to penicillin and streptomycin.

Register for a complimentary professional sample of Neo-Antergan.

Wm. S. Merrell Company Booth No. 24
Cincinnati, Ohio



Mercodol, the new antitussive syrup containing the better cough-controlling narcotic, Mercodinone, will be featured by Merrell. Mercodinone, a better antitussive agent than either heroin or codeine, is notably free from the undesirable side effects of the older drugs. Mercodol also contains the bronchodilator, Nethamine, and the saline-expectorant sodium citrate.

Michigan Medical Service Booth No. 6
Detroit, Michigan

Largest voluntary prepayment medical-surgical plan in the United States. Charts of progress for past year and from inception to date: (a) Assets and Liabilities; (b) Percentage income paid for administrative costs; (c) Paid Doctors for services rendered; (d) Number services rendered; (e) Incidence of service per year for 1,000 subscribers; (f) Cost per case and cases per 1,000 subscribers; (g) Growth in subscribers and services rendered; (h) Number of cases—Veterans program; (i) Advertising program.

C. V. Mosby Company Booth No. 47
St. Louis, Missouri

New and recent releases to be displayed at Booth No. 81 by the C. V. Mosby Company will include Crossen "Operative Gynecology," Ackerman-Regato "Cancer," Watson "Hernia," Clendenen-Hashinger "Methods of Diagnosis," Pottenger "Tuberculosis," Johnstone "Occupational Medicine and Industrial Hygiene," Top "Communicable Diseases," Jeans-Marriott "Infant Nutrition," Eve "Handbook of Fractures," McCormick "Pathology of Labor, the Puerperium, and the Newborn," Treiger "Atlas of Cardiovascular Diseases," and Goar "Synopsis of Ophthalmology," Shands "Handbook of Orthopedic Surgery," Dunbar "Synopsis of Psychosomatic Diagnosis and Treatment" and Wiener "Skin Manifestations of Internal Disorders." Your examination of any of these, as well as the many other titles to be shown, is cordially invited.

TECHNICAL EXHIBITS

Wm. R. Nidelson Company Detroit, Michigan

Booth No. 51

Still the leader of the basal metabolism testers, the Jones "Motor-Basal" will be shown, as will the first successful direct-recording electrocardiograph, the "Cardiotron." Showing for the first time, the new "Profex" Examining Table Model X-Ray for the general practitioner will be on display. This is an ideal unit for the limited space problem.

Ortho Pharmaceutical Corporation Raritan, New Jersey

Booth No. 37

Ortho cordially invites you to Booth 37 where their well known gynecic pharmaceuticals, including Ortho-Gynol and Ortho-Creme will be exhibited. Featured will be NIDOXITAL, for nausea and vomiting of pregnancy, and DIENESTROL CREAM, a topical estrogenic cream for vaginal application in senile and atrophic vaginitis.

Parke, Davis & Company Detroit, Michigan

Booth Nos. 66, 67

Members of the Medical Service Staff of Parke, Davis & Company will be available at Booths No. 66 and No. 67 for consultation and discussion relating to regular products classified in our Pharmaceutical, Biologic, and Medicinal Lists. Unusual Specialties of recent development—Benadryl, Etamon Chloride, Oxyel, Thrombin Topical, Influenza Virus Vaccine, Antibiotics, Hypnotics, Amino Acids, and various Biologics will be featured in the Parke, Davis exhibit. You are cordially invited to call at the exhibit with the assurance that your interest will be appreciated.

Pelton & Crane Company Detroit, Michigan

Booth No. 65

The Pelton & Crane Company will exhibit Autoclaves, Instruments Sterilizers, and Lights. Exhibit will be in charge of Mr. C. K. Vaughan.

Pet Milk Company St. Louis, Missouri

Booth No. 36

A complete display of material illustrating the time-saving Pet Milk services available to physicians. Specially trained representatives will be in attendance to give you information about the production of Pet Milk and its use for infant feeding. Miniature cans will be given to physicians visiting the exhibit.

Philip Morris & Company, Ltd., Inc. New York, New York

Booth No. 76

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

Picker X-Ray Corporation New York, New York

Booth No. 82

The Picker X-Ray Corporation will display the new Weisman Gynograph. This instrument is of the utmost versatility in female sterility procedures. It provides automatic means for the accomplishment of three standard techniques: Carbon dioxide insufflation, Hysterosalpingography and Combined pneumoperitoneum and pelvic viscerography.

Pitman-Moore Company Indianapolis, Indiana

Booth No. 30

The Pitman-Moore display will feature a number of that company's recent research developments, including the recently Council Accepted Rabies Vaccine, Ultra-violet-Irradiation Killed, and Magmoid Sulfadiazine. In addition to medical service representatives from the

Michigan area, home-office personnel will be in attendance to answer questions concerning recent scientific trends.

Procter & Gamble Company Cincinnati, Ohio

Booth No. 25

In Booth No. 25 the Procter & Gamble Company offers the first four of a series of time-saving leaflet pads for doctors. These are entitled, "Instructions for Routine Care of Acne," "Instructions for Bathing a Patient in Bed," "Instructions for Bathing your Baby," and "The Hygiene of Pregnancy."

Professional Management Battle Creek, Michigan

Booth No. 79



Professional Management—"A Michigan Institution with a National Reputation" will be on hand, as usual, with members of the firm available, not only to its hundreds of clients, but to all members of the MSMS for consultation regarding Office Records—Partnership Arrangements—Taxes—Fees and The Business Side of Medical Practice in General.

Radium Emanation Corporation New York, New York

Booth No. 53

The Radium Emanation Corporation invites you to Booth No. 53 where you will see our wide variety of instruments and applicators used in modern Radium Therapy, including permanent and removable LEAK-PROOF radon seeds. A representative will be available to explain this equipment and its usage.

Randolph Surgical Supply Company Detroit, Michigan

Booth No. 69

Randolph Surgical Supply Company will present some fine new equipment, with many new and outstanding time-saving features. Included in this showing will be the very latest in many new diagnostic instruments. On hand to greet our friends will be Cliff Randolph, Arthur Rankin, Fred Greenhut and Myron Ripp.

W. B. Saunders Company Philadelphia, Pennsylvania

Booth No. 2

W. B. Saunders Company will exhibit their full line of medical books including Hyman's "Integrated Practice of Medicine," Bockus' "Gastro-enterology," Kinsey's "Sexual Behavior in the Human Male," Sollmann's "Pharmacology," Beckman's "Treatment," Todd & Sanford's "Clinical Diagnosis by Laboratory Methods," Christopher's "Minor Surgery," Cutting's "Clinical Therapeutics," Dowling's "Acute Bacterial Diseases," Noyes' "Clinical Psychiatry," Brams' "Treatment of Heart Disease," A.M.A. Interns Manual, Thorne's "Psychiatry in General Practice," Willis & Dry's "History of Heart and Circulation," Bastedo's "Pharmacology, Therapeutics and Prescription Writing," Wechsler's "Clinical Neurology," and many others.

Schering Corporation Bloomfield, New Jersey

Booth No. 7

Among the new pharmaceutical and hormone preparations developed in the Schering research laboratories, MICROPELLETS PROGYNON will be featured. This new potent form of the female sex hormone, alpha estradiol, provides maximum results at minimum cost to the patient. COMBISUL and COMBISUL LIQUID, the triple sulfonamide combinations which eliminate the dangers of sulfonamide renal damage will also be presented. Other new developments will highlight the exhibit. Schering Professional Service Representatives will be present to welcome you and will be happy to answer your inquiries concerning Schering's new products as well as their other hormone, x-ray diagnostic, chemotherapeutic, and pharmaceutical specialties.

TECHNICAL EXHIBITS

G. D. Searle & Company Chicago, Illinois

Booth No. 40

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Featured will be Hydryllin, the new antihistaminic, as well as such time-proven products as Searle Aminophyllin in all dosage forms, Metamucil, Ketochol, Floraquin, Kiophyllin, Diodoquin, Pavatrine and Pavatrine with Phenobarbital.

Sharp & Dohme, Inc. Philadelphia, Pennsylvania

Booth No. 17

Sharp & Dohme extends a cordial welcome to all visitors at Booth No. 17. Items on exhibit include a new dosage form of "Delvinal" Sodium Vinbarbital for the production of obstetric amnesia and analgesia. New antibiotic preparations including Tyrothricin along with "Sulfathalidine" and "Sulfasuxidine," intestinal bacteriostatic agents, are also being featured.

Smith, Kline & French Laboratories Philadelphia, Pennsylvania

Booth No. 55

DEXEDRINE SULFATE TABLETS—Dexedrine Sulfate, a notable central nervous stimulant, produces a sustained sense of well-being characteristically free from distracting elation, irritability and inward "nervous tension." This selective action makes it especially valuable whenever accessibility and recreation of interest are desired.

Spencer Incorporated New Haven, Connecticut

Booth No. 20

You are cordially invited to visit our exhibit showing individually designed supports for abdomen, back and breasts. Among the supports featured will be the Spencerflex, an unusually comfortable and flexible support for men, especially suitable for postoperative wear. The Spencer Breast Form, designed to restore normal figure lines for patients who have undergone mastectomy, will also be shown.

E. R. Squibb & Sons New York, New York

Booth No. 74

Featuring Crysticillin (procaine penicillin G for aqueous injection) and other antibiotic agents.

VanPelt and Brown, Inc. Richmond, Virginia

Booth No. 19

Of special interest is Vifoliron, the new and effective blood builder containing ferrous gluconate, ferrous sulfate, liver concentrate, folic acid, and supplementary vitamins.

Barbidonna, sedative and spasmolytic preparation, is also being featured. This preparation is now available both in tablet and elixir forms. For common respiratory disorders Bellaspro and Tussadine have seen wide acceptance.

Inquiries are cordially invited concerning these and other ethical pharmaceuticals of VanPelt and Brown.

Westinghouse Electric Corporation Pittsburgh, Pennsylvania

Booth No. 80

Westinghouse will feature the RX x-ray unit. This low-cost single tube x-ray unit is designed to provide the practitioner with the four essential facilities for x-ray work in his office: it permits the doctor to do either prone fluoroscopy, erect fluoroscopy, prone bucky radiography and erect bucky radiography. The table is exceptionally flexible and compact and can be converted to the above four techniques by merely tilting the table to any position desired.

White Laboratories Newark, New Jersey

Booth No. 57

White's Dienestrol Tablets (Council-Accepted), a new orally effective synthetic estrogen, is featured. Com-

plete information and literature are available regarding the advantages of Dienestrol's high biologic activity, excellent patient-tolerance and economy. Other products of White Laboratories are on display and White's Medical Service Representatives in attendance will be pleased to supply any further information requested.

Winthrop-Stearns, Inc. New York, New York

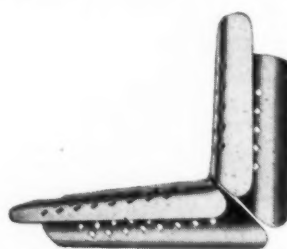
Booth No. 27



You are cordially invited to visit the Winthrop-Stearns Booth No. 27 where representatives will be on hand to discuss the latest introductions of this firm. Featured will be Isuprel hydrochloride, the new potent bronchodilator which, for the first time makes anti-asthmatic therapy possible by the sublingual route as well as by inhalation.

Zimmer Manufacturing Company Warsaw, Indiana

Booth No. 4



Mr. C. A. Fisher, Zimmer factory representative, will exhibit a complete line of fracture equipment in Booth Number 4.

New items on display for your approval will be the **BISHOP LOW SPEED OSCILLATING ATTACHMENT** for your **LUCK BONE SAW**, a new **OSCILLATING ELECTRIC CAST SAW**, a complete new set of **MYERDING CHISELS—GOUGES—OSTEOTOMES, MOREIRA STUD-BOLT, ADJUSTABLE BONE CLAMPS, INTRAMEDULLARY PINS and INSTRUMENTS, THREADED WIRES and PINS, STAPLE SET, ADJUSTABLE INTERTROCHANTERIC PLATE and NAIL, RUBBER CUSHION WALKING HEELS**, and a new **WIRE AND PIN CUTTER**.

THE SPECIALTY BOARDS

(Continued from Page 745)

have now been raised to that level for new applicants.

To date, the American Board of Surgery has granted its certificate to 1,156 in its Founders Group, and 2,120 by examination. In selecting those considered eligible for examination, less than half of those who write to the board are encouraged to submit applications. When applications are filed, about 20 per cent are rejected as not meeting the board's requirements. Of those admitted to the board's examinations, about 25 per cent will fail on their first attempt to receive passing grades. I only mention these details in support of the statement made early in this paper, that the chief purpose of a specialty board, we believe, should be to certify only those who can meet a high standard of performance in proving their claim to be a specialist in surgery, rather than to encourage a much larger number than the country needs who cannot meet its requirements.

Michigan State Medical Society

Roster 1948

(Special Memberships are indicated as follows: "E" for Emeritus Members; "L" for Life Members; "R" Retired Members; "A" for Associate Members, and "M" for Military Members; all others are Active Members)

Allegan County

Baker, A. G.....Allegan
Brown, Lewis Freeman.....Otsego
Brunson, Eugene T.....Ganges
Burdick, J. G.....Allegan
Chace, Walter E.....Martin
Corkill, C. C.....Douglas
Dickinson, C. A.....Wayland

Hudnutt, Orrin Dean.....Plainwell
Johnson, E. B.....Allegan
Kromer, R. A.....Wayland
Mahan, James E.....Allegan
Medill, W. C.....Plainwell
Miller, K. C.....Saugatuck
Ramseyer, Gladwin E.....Plainwell

Rummell, Robert J.....Fennville
Stuck, Olin H.....Otsego
Ten Pas, Henry W.....Hamilton
Van Der Kolk, Bert.....Hopkins
Vaughan, W. R.....Plainwell
Wiseman, Bertha Chase.....Allegan

Alpena-Alcona-Presque Isle Counties

Arcott, E. F.....Rogers City
Bunting, John W.....Alpena
Burkholder, H. J.....Alpena
Carpenter, Clarence A. (L).....Onaway
Constantine, Aeneas.....Harrisville
Foley, Arthur L.....Rogers City

Foley, E. L.....Alpena
Hier, Edward A.....Alpena
Jackson, W. P.....Rogers City
Kessler, Harold.....Alpena
Lister, George F.....Hillman
Nesbitt, Wm. E.....Alpena

O'Donnell, F. J.....Alpena
Parmenter, E. S.....Alpena
Ramsey, J. A.....Alpena
Spens, James E.....Alpena
Wagoner, Darwin E.....Lincoln
Wienczewski, Theophile.....Alpena

Barry County

Bernard, Prosper G.....Delton
Clarke, Daniel M.....Hastings
Finnie, R. G.....Hastings
Gwinn, A. B.....Hastings
Hankamp, La Mar J.....Delton

Harkness, Robert B.....(L) Hastings
Hoffs, M. A.....Lake Odessa
Keller, Guy C.....(L) Hastings
Lofdahl, Stewart.....Nashville

McIntyre, K. S.....Hastings
Morris, Edgar T.....(L) Nashville
Phelps, Everett L.....Hastings
Slee, Vergil.....Hastings
Wedel, Herbert S.....Hastings

Bay-Arenac-Iosco Counties

Alcorn, Kent.....Bay City
Alcorn, Marshall.....Bay City
Allen, A. D.....Bay City
Asline, J. N.....Essexville
Austin, Justis.....Tawas City
Ballard, W. R.....(E) Bay City
Boulton, A. O.....(E) Gladwin
Brown, G. M.....Bay City
Chapin, Frederick S.....Bay City
Connelly, J. C.....Bay City
Criswell, R. H.....Bay City
Dardas, M. J.....Bay City
DeWaele, Paul L.....Bay City
Dolbee, Malcolm.....Standish
Drummond, Fred.....Kawkawlin
Dumond, V. H.....Bay City
Ely, Nina (L).....Bay City
Fisher, Robert E.....Bay City
Foster, L. Fernald.....Bay City
Freel, John A.....Bay City
Gamble, W. G., Jr.....Bay City
Grosjean, J. C. (L).....Bay City
Gunn, Robert.....Bay City
Haitinger, K. S.....Auburn

Hagelshaw, G. L.....Bay City
Hess, C. L.....Bay City
Heuser, Harold H.....Bay City
Horowitz, S. Franklin.....Bay City
Huckins, E. S.....Bay City
Huckins, Rodger S.....Bay City
Hughes, E. C.....(L) Bay City
Husted, F. Pitkin.....Bay City
Jacoby, A. H.....Bay City
Jens, Otto.....Essexville
Johnson, Orlen J.....Bay City
Jones, Culver.....Bay City
Jones, Jerry M.....(E) Bay City
Keho, John.....(L) Bay City
Kessler, Mana.....Bay City
Kessler, Saba.....Bay City
Knobloch, Howard.....Bay City
Lerner, David.....Au Gres
Loftin, Robert.....Bay City
McDonnell, Walter R.....Pinconning
McEwan, J. H.....Bay City
MacPhail, Joseph.....Bay City
MacRae, L. Douglas.....Bay City
Medvezky, M. J.....Bay City
Miller, Edwin C.....Bay City

Mitton, Orland W.....East Tawas
Moore, George W. (L).....Bay City
Moore, Neal R.....Bay City
Mosier, D. J.....Bay City
Pearson, Stanley M.....Bay City
Reuter, C. W.....Bay City
Scrafford, Royston Earl.....Bay City
Shafer, Harold C.....Bay City
Sherman, R. N.....Bay City
Smith, J. Campbell.....Bay City
Staley, Hugh.....Omer
Stinson, W. S.....Bay City
Stewart, G. C.....Bay City
Tarter, Clyde S.....Bay City
Timreck, Harold A.....Gladwin
Tupper, Virgil L.....(R) Bay City
Urmston, Paul R.....Bay City
Vail, Harry F.....Bay City
Warren, E. C.....(E) Bay City
Wilcox, J. W.....Bay City
Wilson, Thomas G.....Bay City
Wittwer, E. A. (L).....Bay City
Zaremba, Aloysius J.....Bay City
Ziliak, A. L.....Bay City

Berrien County

Allen, Robert C.....St. Joseph
Anderson, Bertha.....St. Joseph
Anderson, H. B.....Watervliet
Belsley, Frank K.....Benton Harbor
Bjork, Harold.....St. Joseph
Bliesmer, A. F.....St. Joseph
Brown, F. W.....Watervliet
Burrell, H. J.....Benton Harbor
Cawthorne, H. J.....Benton Harbor
Conybeare, R. C.....Benton Harbor
Cowdery, K. H.....St. Joseph
Crowell, Richard.....St. Joseph
Dunnington, R. N.....Benton Harbor
Emery, Clayton.....St. Joseph
Faber, Michael.....Benton Harbor
Foucek, B. Charles.....Three Oaks
Friedman, Morris.....New Buffalo
Garrett, Evan L.....Niles
Gillette, Clarence H.....Niles
Green, Robert.....Eau Claire
Gregory, James.....Berrien Center

Hanna, P. G.....St. Joseph
Harper, Ina.....Benton Harbor
Harrison, L. L.....Niles
Hart, Russell.....Niles
Henderson, Fred.....Niles
Henderson, Robert.....Niles
Hershey, Noel E.....Niles
Holt, Robert E., Jr.....Niles
Johnson, O. V.....Benton Harbor
Kelsall, H. I.....St. Joseph
King, B. B.....Benton Harbor
King, Frank, Jr.....Benton Harbor
Kling, H. C.....Niles
Kok, Harry.....Benton Harbor
Lawton, Clare V.....Benton Harbor
Leva, John B.....Benton Harbor
Louisell, Charles T.....St. Joseph
Miller, E. A.....Berrien Springs
Mitchell, Carl A.....Benton Harbor
Moore, T. Scott.....Niles

Neville, J. William.....Benton Harbor
Ozeran, C. J.....Benton Harbor
Pritchard, H. M.....Niles
Reagan, Robert E.....Benton Harbor
Rein, Gerald.....Benton Harbor
Rice, F. A.....Niles
Rice, Franklin.....Niles
Richmond, D. M.....St. Joseph
Ruth, J. Griswold.....Benton Harbor
Schairer, William W.....Coloma
Smith, W. A.....Berrien Springs
Sowers, Bouton.....Benton Harbor
Strayer, J. C.....Buchanan
Strick, Marvin H.....Benton Harbor
Thorup, D. W.....Benton Harbor
Tompkins, C. E.....Benton Harbor
Urist, Maurice D.....Benton Harbor
Waterson, Roy S.....Niles
Westervelt, H. O.....Benton Harbor
Winter, Joseph A.....St. Joseph
Yeomans, T. G.....St. Joseph

ROSTER 1948

Branch County

Andrews, Frank A.....Coldwater
Atkinson, A. L.....Quincy
Bailey, J. E.....Coldwater
Beck, Perry C.....Bronson
Bien, W. J.....Coldwater
Culver, Bert W.....Coldwater
Culver, Dean.....Bronson

Fraser, R. J.....Coldwater
Heustis, Albert E.....Coldwater
Leitch, R. M.....Union City
McLain, R. W.....Jackson
Meier, H. J.....Coldwater
Mool, H. R.....Coldwater

Olmstead, Kenneth L.....Coldwater
Rees, Kendall B.....Coldwater
Rennell, E. J.....Coldwater
Thomas, J. A.....Coldwater
Wade, R. L.....Coldwater
Walton, N. J.....Quincy
Weidner, H. R.....Coldwater

Calhoun County

Albright, Arnold A. (M).....Battle Creek
Alling, Emery E. (M).....New York City
Altman, George L. (M).....New York
Amos, Norman H.....Battle Creek
Barden, Stuart P.....Battle Creek
Baribeau, R. H.....Battle Creek
Becker, H. F.....Battle Creek
Berwald, Herbert T. (M).....Battle Creek
Beuker, Herman.....Marshall
Bodine, Harold R.....Battle Creek
Bonifer, Philip P.....Battle Creek
Brainard, C. W.....Battle Creek
Cameron, J. M. (M).....Battle Creek
Campbell, Alice.....Albion
Campbell, R. J.....Battle Creek
Capron, Manley J.....Battle Creek
Church, Starr K.....(E) Marshall
Chynoweth, W. R.....Battle Creek
Coleman, Floyd B. (M).....Battle Creek
Cooper, J. E.....Battle Creek
Cretsinger, Francis C. (M).....Battle Creek
Curry, Robert K.....Homer
Dickson, A. R.....Battle Creek
Dodge, Warren M., Jr.....Battle Creek
Fairbanks, Stephen.....Albion
Finch, D. L.....Battle Creek
Forsyth, J. F.....Albion
Fraser, R. H.....Battle Creek
Funk, L. D.....Athens
Gething, Joseph W.....Battle Creek
Giddings, A. M.....Battle Creek
Gillfillan, Margery J.....Battle Creek
Gorsline, Clarence S. (L).....Battle Creek
Graubner, F. L.....Marshall
Gregory, Charles F. (M).....Battle Creek
Hansen, E. L.....Battle Creek
Hansen, Harvey C.....Battle Creek
Haughey, Wilfrid.....Battle Creek
Heald, C. W.....Battle Creek

Henderson, Philip.....Albion
Herzer, Henry A.....Albion
Hibbs, Donald K.....Battle Creek
Hills, C. R.....Battle Creek
Hollands, Robert A.....Battle Creek
Holton, B. G.....Battle Creek
Hoyt, Aura A.....Battle Creek
Hubly, James W.....Battle Creek
Humphrey, Archie E.....Marshall
Humphrey, Arthur A.....Battle Creek
Jeffrey, J. R.....Battle Creek
Jespersen, Lydia (L).....Battle Creek
Jones, H. Aubrey.....Marshall
Jones, Robert R. (M).....Battle Creek
Jones, T. K.....Marshall
Keagle, Leland R.....Battle Creek
Keeler, K. B.....Albion
Kimball, A. S., Jr.....Battle Creek
Kinde, M. R.....Battle Creek
Kingsley, Paul C.....Battle Creek
Knapp, Nettie E.....Battle Creek
Kolvoord, Theodore.....Battle Creek
LaFrance, N. Francis.....Battle Creek
Lam, Francis.....Battle Creek
Levy, Joseph.....Battle Creek
Lewis, W. B.....Battle Creek
Linn, Frank D.....Albion
Lodmell, Elmer A. (M).....Battle Creek
Lowe, Kenneth M.....Battle Creek
Lowe, Stanley T.....Battle Creek
MacGregory, Arch. E. (L).....Battle Creek
Manni, Lawrence C.....Battle Creek
McNair, Lawrence N.....Albion
Meister, F. O.....Battle Creek
Melges, F. J.....Battle Creek
Mercer, C. M.....Battle Creek
Morrison, Donald.....Battle Creek
Moshier, Bertha.....(R) Battle Creek
Mullenmeister, H. F.....Battle Creek

Mustard, Russell.....Battle Creek
Patrick, Gilbert.....Battle Creek
Patterson, Adonis.....Wash., D. C.
Pearson, Donald J.....Battle Creek
Putnam, W. N.....Battle Creek
Robbert, John.....Battle Creek
Robins, Hugh.....Marshall
Rorick, Wilma Weeks.....Battle Creek
Rosenfeld, Joseph E.....Battle Creek
Royer, C. W.....Battle Creek
Rylander, Carl M. (M).....Battle Creek
Satterthwaite, R. W. (M).....Battle Creek
Schelm, George W.....Battle Creek
Schwary, Frank W.....Battle Creek
Selmon, Bertha L. (L).....Battle Creek
Sharp, A. D.....Albion
Shipp, L. P.....Battle Creek
Shellenberger, Herbert M.....Marshall
Sibilsky, A. Clark.....Battle Creek
Simpson, Robert S.....Battle Creek
Slagle, George W.....Battle Creek
Sleight, James D.....Battle Creek
Stadle, Wendell H.....Battle Creek
Stiefel, Richard.....Battle Creek
Strohenger, Frank J.....Albion
Sullivan, Donel (M).....Battle Creek
Tannenholz, Harold S.....Battle Creek
Taylor, Clifford B.....Albion
Thompson, Fred R.....Battle Creek
Thompson, Ralph M. (M).....Battle Creek
VanderVoort, W. V. (L).....Battle Creek
Verity, Lloyd E.....Battle Creek
Walters, F. R.....Battle Creek
Walters, John F.....Battle Creek
Wencke, Carl G.....Battle Creek
Winslow, Sherwood B.....Battle Creek
Wiseley, Allen N.....(M) Battle Creek
Worress, Duane R.....Battle Creek
Zindler, George A.....Battle Creek

Cass County

Adams, U. M.....Marcellus
Britton, George T.....Marcellus
Clary, R. I.....Dowagiac
Hickman, John.....Dowagiac

Kelsey, James H.....Cassopolis
Loupee, George E.....Dowagiac
Loupee, S. L.....Dowagiac
Lyman, W. R.....Dowagiac

Newsome, Otis.....Cassopolis
Pierce, Kenneth C.....Dowagiac
Zwergel, E. H.....Cassopolis

Chippewa-Mackinac Counties

Bandy, F. C.....Sault Ste. Marie
Blain, James G.....Sault Ste. Marie
Blair, H. M.....Sault Ste. Marie
Carr, E. S.....Pickford
Cowan, Donald A.....Sault Ste. Marie
Finlayson, D. D.....Sault Ste. Marie
Gillfillan, E. O.....Sault Ste. Marie
Goldberg, A. H.....Sault Ste. Marie

Hagele, Marie A.....Sault Ste. Marie
Harrington, H. M.....Sault Ste. Marie
Hamel, Herbert E.....St. Ignace
Howe, D. C.....Sault Ste. Marie
Howe, Gertrude.....Sault Ste. Marie
Mackie, Thomas B.....Sault Ste. Marie
McBryde, Lyman M.....Sault Ste. Marie
Mertaugh, W. F.....Sault Ste. Marie

Montgomery, B. T.....Sault Ste. Marie
Rhind, E. S.....Sault Ste. Marie
Scott, Dwight F.....Sault Ste. Marie
Thompson, T. W.....Sault Ste. Marie
Trapasso, T. G.....Sault Ste. Marie
Wallen, LeRoy J.....Sault Ste. Marie
Willison, C.....(E) Sault Ste. Marie
Yale, I. V.....Sault Ste. Marie

Clinton County

Cook, Bruno.....Westphalia
Elliott, Bruce R.....Ovid
Foo, Charles T.....St. Johns
Frace, Guy H.....St. Johns

Henthorn, A. C.....St. Johns
Ho, Thomas Y.....St. Johns
Luton, F. E.....St. Johns
McWilliams, W. B.....Maple Rapids

Miller, Charles S.....Big Rapids
Russell, Sherwood R.....St. Johns
Stoller, Paul F.....St. Johns
Wahl, George Edward.....St. Johns

Delta-Schoolcraft Counties

Benson, G. W.....Escanaba
Bernier, A. Barro.....Nahma
Boyce, D. H.....Escanaba
Brenner, Ervin J.....Manistique
Carlton, A. J.....Escanaba
Chenoweth, Nancy R.....(E) Peterborough
Ontario, Canada
Clausen, Claire H.....Dearborn
Defnet, Harry John.....Escanaba
Dehlin, James R.....Gladstone

Diamond, J. A.....Gladstone
Frenn, N. J.....Bark River
Fyvie, James.....Manistique
Groos, Harold Quinten.....Escanaba
Groos, Louis P.....Escanaba
Harrison, William C.....Escanaba
Hult, Otto S.....Gladstone
Kee, Charles E.....Gladstone
Lemire, Donald F.....Escanaba

Lemire, Wm. A.....Escanaba
Lindquist, N. L.....Escanaba
McInerney, Thomas A.....Escanaba
Miller, Albert H.....Gladstone
Moll, G. W.....Escanaba
Ryde, Robert E.....Gladstone
Shaw, George A.....Manistique
Walch, J. J.....Escanaba
Wehner, Merle E.....Manistique

Dickinson-Iron Counties

Addison, E. R.....Crystal Falls
Alexander, W. H.....Iron Mountain
Boyce, George H.....Iron Mountain
Browning, James L.....Iron Mountain
Cooper, C. A.....Stambaugh
Fiedling, Wm.....Norway

Hayes, R. E.....Sagola
Hayes, Willard N.....Norway
Huron, W. H.....Iron Mountain
Irvine, L. E.....Iron River
Kofmehl, Wm. J.....Stambaugh

McEachran, Hugh D.....Iron Mountain
Palm, E. Theodore.....Crystal Falls
Retallack, R. C.....Iron River
Smith, Donald R.....Iron Mountain
Steinke, Charles G.....Iron Mountain

ROSTER 1948

Eaton County

Arner, Fred Levi.....Bellevue
Brown, B. Philip.....Charlotte
Carothers, Daniel J.....Charlotte
Hannah, H. W.....Charlotte
Harrod, Gordon.....Grand Ledge

Huber, Chas. D. (L).....Charlotte
Inthun, Edgar F.....Grand Ledge
Meinke, Albert.....Eaton Rapids
Myers, Albert W.....Pottersville
Sevener, Lester G.....Charlotte

Stucky, Geo.....Charlotte
Van Ark, Bert.....Eaton Rapids
Van Ark, Herman.....Eaton Rapids
Whitlock, S. C.....Dimondale
Willits, C. O.....Charlotte

Genesee County

Adams, Burnell.....Flint
Adams, Chester.....Grand Blanc
Anderson, Harley H.....Mt. Morris
Andrews, N. A. C.....Flushing
Anthony, Geo. E.....Flint
Backus, Glenn R.....Flint
Baird, W. C.....Flint
Bald, Frederick W.....Flint
Barbour, Fleming A.....Flint
Baske, Franklin.....Flint
Bateman, L. G.....Flint
Beason, J. C., Sr.....Flint
Benson, John C., Jr.....Flint
Bernstein, Eli N.....Flint
Beyer, Damon P.....Clio
Beyer, George D.....Clio
Biggar, H. R.....Flint
Bishop, D. L.....Flint
Blakeley, A. C.....Flint
Bogart, Leon M.....Flint
Boles, William P.....Flint
Bonathan, Alvin T.....Flint
Bradley, Robert.....Flint
Brain, R. Gordon.....Flint
Branch, Hira E.....Flint
Brasie, Donald R.....Flint
Briggs, Guy D.....Flint
Bruce, Wm. W.....Swartz Creek
Buchanan, W. Fremont.....Fenton
Burkett, L. V.....Flint
Burnell, Max.....Flint
Caster, E. Wilbur.....Huntington Woods
Chambers, Myrton S.....Flint
Chandler, M. E.....(L) Flint
Charters, John H.....(E) Flint
Clark, Clifford P.....Flint
Colwell, C. W.....Flint
Connell, J. T.....Flint
Conover, G. V.....Flint
Conover, McClellan.....Flint
Conover, T. S.....Flint
Cook, Henry.....Flint
Cover, F. L.....Gaines
Craig, William G.....Flint
Credille, B. A.....Flint
Curry, George.....Flint
Curtin, J. H.....Flint
Cutler, G. Campbell.....Flint
David, T. George.....Flint
Del Zingro, N.....Davison
Denholm, Nan H.....Flint
Dickstein, Bernard.....Flint
Dimond, E. G.....Flint
Dodds, F. E.....Flint
Eichhorn, Ernest.....Flint
Eickhorst, Thomas N.....Flint
Elliott, H. B.....Flint
Evers, J. W.....Flint
Ettinger, Ralph D.....Fenton
Farhat, M. M.....Flint
Fee, Manson G.....Flint
Finkelstein, T.....Flint
Flynn, S. T.....Flint
Foley, S. I.....Flint
Fuller, H. T.....Mt. Morris

Gelenger, Stephen M.....Flint
Gleason, N. Arthur.....Flint
Golden, H. Maxwell.....Flint
Goodfellow, B. A.....Flint
Gorne, S. S.....Flint
Griffin, Ernest P., Jr.....Flint
Grover, H. F.....Flint
Guile, Earl B.....(L) Flint
Guile, G. S.....Flint
Gundry, G. L.....Grand Blanc
Gutow, I.....Flint
Gutow, J. J.....Flint
Hague, R. F.....Flint
Halligan, Raymond S.....Flint
Hamady, Ruth.....Flint
Hamilton, A. J.....Flint
Harper, Alex W.....(L) Flint
Harper, Homer.....Flint
Hawkins, James E.....Flint
Hays, George A.....Flint
Hiscock, H. H.....Flint
Hooper, Kendall.....Flint
Houston, James.....(L) Swartz Creek
Hubbard, Wm. B.....Flint
Hulton, Wilfred L.....Flint
Jermstad, Robert J.....Flint
Johnson, Arthur H.....Flint
Johnson, Frank D.....Flint
Jones, Lafon.....Flint
Judd, Alvin.....Flint
Kaleta, Edward.....Flint
Kaufman, Lewis D.....Flint
Knapp, M. S.....(R) Fenton
Knapp, Wm. D.....Flint
Kretchmar, A. H.....Flint
Kurtz, J. J.....Flint
Lambert, L. A.....Flint
Leach, J. L.....Flint
Limbach, David R.....Flint
Livesay, Jackson E.....Flint
Logan, G. W.....(L) Flushing
MacDuff, R. B.....Flint
MacGregor, D. M.....Flint
Macksood, Joseph.....Flint
Marsh, H. L.....Flint
McArthur, A.....Flint
McGarry, R. A.....Flint
McKenna, O. W.....(E) Flint
McLeod, K. W. A.....Flint
Miller, Bryce.....Flushing
Miller, Loren Eugene.....Flint
Miltich, Anthony J.....Flint
Moore, Kenneth B.....Flint
Moore, Wesley P.....Flint
Morrish, Ray S.....Flint
Morrison, William H.....Goodrich
Morrissey, V. H.....Flint
Mosier, Edward C.....Otisville
Odle, Ira.....Flint
O'Neil, C. H.....(R) Deckerville
Orr, J. Walter.....Flint
Phillips, R. L.....Flint
Pfeifer, A. C.....Mt. Morris
Pratz, O. C.....Flint
Preston, Otto.....Flint

Randall, H. E.....(E) Flint
Rawlings, J. Mott.....Flint
Reeder, Frank E.....Flint
Reichard, Orill.....Flint
Reid, Wells C.....Goodrich
Richeson, V.....Flint
Rieth, George F.....Flint
Roberts, Floyd A.....Flint
Rulney, Max.....Flint
Rundles, Walter Z.....Flint
Rynearson, W. J.....Fenton
Sandy, K. R.....Flint
Scavarda, Charles J.....Flint
Schiff, Benton A.....Flint
Schreiber, E. Oskar.....Flint
Scott, R. D.....Flint
Searles, Karl F.....Flint
Shantz, L. O.....Flint
Sheeran, Daniel H.....Flint
Shipman, Charles W.....Flint
Sirna, Anthony R.....Flint
Sleeman, Blythe R.....Linden
Smith, D. C.....Flint
Smith, E. C.....Flint
Smith, Maurice J.....Flint
Sniderman, Benjamin.....Flint
Snyder, Charles E.....Swartz Creek
Sorkin, Morris L.....Flint
Sorkin, S. S.....Flint
Sparks, Harvey D.....Flint
Steffe, Ralph S.....Flint
Steinman, Floyd H.....Flint
Stephenson, Robert A.....Flint
Stevenson, W. W.....Flint
Streat, R. W.....Flint
Stroup, C. K.....Flint
Sutherland, James K.....Flint
Sutton, George.....Flint
Sutton, M. R.....Flint
Thompson, Alvin.....Flint
Tofteland, Elmer H.....Flint
Treat, D. L.....(L) Flint
Trumble, G. W.....Flint
Turner, Merald G.....Flint
Van Gorder, George.....Davison
Van Harn, R. S.....Flint
Vary, Edwin P.....Flint
Walcott, C. G.....Fenton
Ward, Nell.....Flint
Ware, Frank A.....Flint
Wark, D. R.....Flint
Wentworth, John E.....Flint
Werness, Inga W.....Flint
Westcott, George W.....Goodrich
White, Carl H.....Fenton
White, Herbert.....Flint
Williams, W. S.....Flint
Willoughby, G. L.....Flint
Willoughby, L. L.....(L) Flint
Wills, T. N.....Flint
Winchester, Walter H.....(L) Flint
Woughter, Harold W.....Flint
Wright, D. W.....Flint
Wyman, J. S.....Flint

Gogebic County

Albert, S. G.....Ironwood
Anderson, Charles E.....Anvil
Davidson, Donald L.....Bessmer
Eisele, D. C.....Ironwood
Frank, J. R.....Wakefield
Gertz, M. A.....Ironwood

Gingrich, Wayne A.....Ironwood
Gorrilla, A. C.....Ironwood
Lieberthal, M. J.....Ironwood
Lieberthal, Paul.....Ironwood
Lojacono, Salvatore.....Ironwood
Maccani, Wm. L.....Ironwood
Nezworski, H. T.....Ironwood

O'Brien, A. J.....Ironwood
Pinkerton, H. A.....Ironwood
Stevens, Chas. E.....Ironwood
Tressel, H. A.....Wakefield
Urquhart, C. C.....Ironwood
Wacek, W. H.....Ironwood

Grand Traverse-Leelanau-Benzie Counties

Beall, John G.....Traverse City
Berghorst, John.....Traverse City
Bolam, Ellis J.....Suttons Bay
Brownson, Jay J.....Kingsley
Brownson, Kneale M.....Traverse City
Rushong, B. B.....Traverse City
Cannon, Robert.....Traverse City
Ellis, Claude I.....Suttons Bay

Evseef, George S.....Traverse City
Gauntlett, J. W.....(L) Traverse City
Goodrich, Dwight.....Traverse City
Haberlein, Charles R.....Traverse City
Hall, James W.....Traverse City
Hamilton, Earl E.....Traverse City
Huene, Nevin.....Traverse City
Huston, Russell R.....Elk Rapids
Wm. T. Hyslop.....Traverse City

Jerome, Jerome T.....Traverse City
Kyselka, H. B.....Traverse City
Lemen, Chas. E.....Traverse City
Lentz, R. J.....Traverse City
Lossman, Robert T.....Detroit
Manwaring, Thomas.....Traverse City
Meng, Ralph H.....Traverse City
Mumby, Clinton J.....Traverse City

ROSTER 1948

Nickels, M. M.....Traverse City
Osterhagen, H. F.....Traverse City
Osterlin, Mark.....Traverse City
Pike, Donald.....Traverse City
Power, Frank H.....Traverse City
Salon, Dayton D.....Traverse City
Sheets, R. Philip.....Traverse City

Sladek, E. F.....Traverse City
Stone, Fordyce H.....Beulah
Swartz, F. G.....Traverse City
Thirlby, E. L.....Traverse City
Trautman, Frederick B.....Frankfort
Way, Lewis R.....Traverse City
Weitz, Harry.....Traverse City

Whitehouse, John D.....Traverse City
Wilcox, Paul H.....Traverse City
Willoughby, Frances L.....Washington
25, D. C.
Zielke, I. H.....Traverse City
Zimmerman, J. G.....Traverse City

Gratiot-Isabella-Clare Counties

Aldrich, Alfred L.....Ithaca
Barstow, D. K.....St. Louis
Barstow, Wm. E.....St. Louis
Becker, Myron G.....Edmore
Budge, M. J.....Ithaca
Burch, L. J.....(E) Mt. Pleasant
Burt, C. E.....Ithaca
Davis, L. L.....Mt. Pleasant
Drake, Wilkie M.....Breckenridge
DuBois, C. F.....Alma

Graham, B. J.....Alma
Gray, Thomas J.....Mt. Pleasant
Hall, B. C.....(E) Pompeii
Hammerberg, Kuno.....Clare
Harrigan, Wm. L.....Mt. Pleasant
Hersee, Wm. E.....Mt. Pleasant
Hobbs, A. D.....St. Louis
Hyslop, Leland F.....Mt. Pleasant
Kilborn, H. F.....Ithaca
McArthur, Stewart C.....Clare
Miller, S. W.....Alma

Oldham, E. S.....Breckenridge
Putzig, Louis M.....Blanchard
Rondot, E. F.....Mt. Pleasant
Rottschaefer, J. L.....Alma
Strange, Russell H.....Mt. Pleasant
Waggoner, R. L.....St. Louis
Wilcox, R. A.....Alma
Wilson, Earl C.....Harrison
Wolfe, Kenneth P.....Alma
Wood, Cornelius B.....Mt. Pleasant

Hillsdale County

Bates, Morton P.....Hillsdale
Day, Luther W.....Jonesville
Douglas, E. W.....Hillsdale
Green, B. F.....Hillsdale
Hanke, Geo. R.....Ransom
Hodge, C. L.....Reading

Hughes, Henry F.....(L) Hillsdale
Kline, Fred D.....Litchfield
MacNeal, John A.....Hillsdale
Martindale, E. A.....(L) Hillsdale
Mattson, H. F.....Hillsdale
McFarland, O. G.....North Adams

Miller, Harry C.....(L) Hillsdale
Peterson, Carl A.....Hillsdale
Sawyer, Walter W.....Hillsdale
Strom, A. W.....Hillsdale
Trapp, Donald.....Hillsdale
Wiggings, I. W.....Jonesville

Houghton County

Aldrich, A. B.....Houghton
Aldrich, Addison D.....Houghton
Aldrich, Leonard C.....Hancock
Bourland, Phillip D.....(L) Calumet
Brewington, George F.....(E) Mohawk
Burke, John J.....Hubbell
Conrad, George B.....Houghton
Gregg, W. T. S.....(E) Calumet
Hillmer, Raymond E.....Painesdale
Hosking, Frederick S.....Laurium
Janis, A. J.....Houghton

King, Wm. T.....Ahmeek
Kirtan, Job R. W.....Calumet
Kolb, F. E.....Calumet
LaBine, Alfred.....Houghton
Levin, Simon.....Houghton
MacQueen, Donald K.....(E) Laurium
Manthei, W. A.....Lake Linden
Murphy, Percy J.....Ahmeek
Quick, James B.....(L) Laurium
Roberts, Melvin D.....Hancock
Roche, A. C.....Calumet

Roche, Andrew M.....Laurium
Sarvela, H. L.....Hancock
Scott, Benton V. D.....Chassell
Sloan, P. S.....Houghton
Smith, Charles R.....Hancock
Stahr, H. S.....Modesta, Calif.
Stern, Isadore D.....Houghton
Whitmore, R. C.....Hancock
Wickliffe, John T. P.....Calumet
Winkler, Henry J.....L'Anse
Wood, Neal N.....Calumet

Huron County

Dixon, R. C.....Pigeon
Henderson, J. Bates.....Sebewaing
Herrington, Charles I.....Bad Axe
Herrington, Willet J.....Bad Axe
Holdship, Wm. B.....Uby

Monroe, Duncan J.....(L) Elkton
Morden, Charles B.....Bad Axe
Oakes, C. W.....Harbor Beach
Ritsem, John.....Sebewaing
Scheurer, Clare A.....Pigeon

Sorensen, Maurice G.....Kinde
Staryk, Steven E.....Kinde
Steinhardt, Edward E.....Elkton
Thumme, Harrison F.....Sebewaing
Turner, Phillip R.....Harbor Beach

Ingham County

Alexander, Reuben G.....Lansing
Altland, J. K.....Lansing
Bartholomew, Henry S.....(R) Lansing
Bauer, Theodore I.....Lansing
Bellinger, E. G.....Lansing
Bradford, C. W.....Lansing
Breakey, Robert S.....Lansing
Briede, Paul C.....Lansing
Burhans, Robert.....Lansing
Cameron, W. J.....Lansing
Carr, E. I.....Lansing
Clarke, Emilie Arnold.....Lansing
Cope, H. E.....Lansing
Corneliuson, Goldie B.....Lansing
Cross, Frank S.....Lansing
DeKleine, William.....Lansing
Doyle, C. P.....(E) Lansing
Drolett, Lawrence.....Lansing
Dunn, F. C.....(L) Lansing
Ellis, Bertha.....East Lansing
Ellis, C. W.....Lansing
Feeney, Kenneth J.....Lansing
Folkers, Leonard M.....East Lansing
French, Horace L.....Lansing

Gould, Marian Iddings.....Lansing
Harrison, W. H.....Lansing
Hart, L. C.....Lansing
Heckert, Frank B.....Lansing
Heckert, J. K.....Lansing
Hendren, Owen.....Lansing
Himmelberger, R. J.....Lansing
Huggett, Clare C.....Lansing
Hurth, M. S.....Lansing
Jacob, S. Sprigg.....East Lansing
Johnson, K. H.....Lansing
Kahn, David.....Lansing
Kalmbach, R. E.....Lansing
Kenyon, Fanny H.....Lansing
Lanting, Helen E.....East Lansing
Lanting, Roelof.....Lansing
Markuson, Kenneth E.....Lansing
McConnell, E. G.....(R) Lansing
McCorvie, C. Ray.....East Lansing
McCoy, Earl M.....Grand Ledge
McElmurry, Leland R.....Lansing
McNamara, William E.....Lansing
Miller, H. A.....Lansing
Mitchell, A. B.....Lansing
Ochsner, P. J.....Lansing

O'Sullivan, Gertrude.....(E) Mason
Pinkham, R. A.....Lansing
Place, Edwin H.....Lansing
Rector, Frank L.....Ann Arbor
Rozan, Milton.....Lansing
Russell, Claude V.....(R) Lansing
Sander, John F.....Lansing
Sanford, Thomas M.....(E) Lansing
Scheidt, R. Rudolph.....Lansing
Seger, Fred L.....(L) Lansing
Shaw, Milton.....Lansing
Sichler, Harper G.....Lansing
Snyder, Ruth E.....Lansing
Stanka, Andrew G.....Grand Ledge
Steiner, A. A.....Lansing
Steiner, S. D.....Lansing
Stiles, Frank.....Lansing
Trimby, Robert H.....Lansing
Troost, F. L.....Holt
Vander Zalm, T. P.....Lansing
Wellman, John M.....Lansing
Wilensky, Thomas.....Lansing
Willson, Howard S.....Lansing
Wilson, Harry A.....Lansing

ROSTER 1948

Ionian-Montcalm Counties

Anderson, Donald H.....Portland
Bird, Wm. L.....Greenville
Brace, L. E.....Sheridan
Bunce, E. P.....Trufant
Bunce, Leo.....Trufant
Dunkin, Lloyd S.....Greenville
Fleming, J. C.....Pewamo
Fox, Harold M.....Portland
Freiswyk, Melvin J.....(M) Belding
Geib, O. P.....Carson City
Hansen, Carl M.....Stanton
Hansen, M. M.....Greenville

Haskell, Robert H.....Northville
Hoffs, M. A.....Lake Odessa
Hollard, A. E.....Belding
Kelsey, L. E.....Lakeview
Lilly, Isaac S.....Stanton
Marston, L. L.....Lakeview
McCann, John J.....Ionian
Michmerhuizen, Robert E.....Lake Odessa
Pankhurst, C. T.....Ionian
Peabody, C. H.....(L) Lake Odessa
Reid, Harold E.....Stanton

Rice, Robert E.....Greenville
Robertson, P. C.....Ionian
Seidel, Karl E.....Ionian
Slade, H. G.....Ionian
Slagh, Milton E.....Saranac
Snider, J. D.....Ionian
Socha, Edmund S.....Ionian
Swift, E. R.....(L) Lakeview
VanLoo, J. A.....Belding
Weaver, Harry B.....Greenville
Whitten, R. R.....Ionian
Winchell, C. P.....(M) Augusta, Ga.

Jackson County

Adams, D. C.....Jackson
Ahronheim, J. H.....Jackson
Alter, R. H.....Jackson
Anderson, W. B.....Jackson
Appel, S.....Jackson
Bartholic, F. W.....Homer
Beckwith, S. A.....Stockbridge
Binschedler, Buell S.....Jackson
Bullen, G. R.....Jackson
Chabut, H. M.....Jackson
Clarke, C. S.....Jackson
Cochrane, Wayne A.....(L) Jackson
Cooley, Randall M.....Jackson
Corley, C.....Jackson
Corley, Ennis.....Jackson
Cox, Ferdinand.....Jackson
Culver, Guy D.....Stockbridge
DeMay, C. E.....Jackson
DeMay, John.....Jackson
Deming, Richard C.....Jackson
Dengler, C. R.....Jackson
Durocher, Normand E.....Jackson
Edmonds, J. M.....Sandi, Arabia
Enders, W. H.....Jackson
Filip, H. K.....Jackson
Finton, Robert E.....(M) Jackson
Finton, Walter L.....Jackson
Fisher, Joseph V.....Chelsea
Foust, W. L.....Grass Lake
Gibson, F. J.....(L) Jackson
Gordon, D. L.....Jackson
Greenbaum, Harry.....Jackson
Growt, Bowers H.....Addison
Habenicht, Hilda.....Jackson
Hackett, T. E.....Jackson
Hackett, Thomas L.....Jackson

Hanft, Cyril F.....Springport
Hanna, R. J.....Jackson
Hardie, G. C.....Jackson
Harris, Lester J.....(E) Jackson
Hicks, Glenn C.....Jackson
Holst, John B.....Jackson
Holstein, A. P.....Manchester
Huebner, R. J.....Addison
Huntley, W. B.....Hudson
Hurley, H. L.....Jackson
Keefer, A. H.....Concord
Kudner, Don F.....Jackson
Landron, Daniel.....Michigan Center
Lathrop, Wm. W. (E).....Jackson
Leahy, E. O.....Jackson
Lenz, C. R.....Jackson
Leonard, Clyde A.....Jackson
Lewis, E. F.....Jackson
Linden, V. E.....Jackson
Ludwick, J. E.....Jackson
McGarvey, W. E.....Jackson
McLaughlin, M. J.....Jackson
McLauthlin, Herbert B.....Jackson
Meads, J. B.....Jackson
Miller, J. L.....Jackson
Miller, Samuel L.....Jackson
Munnell, Edward R.....(M) Louisville, Ky.
Munro, C. D.....(E) Jackson
Munro, James E.....Jackson
Munro, Nathan D.....Jackson
Murphy, B. M.....Jackson
Newton, R. E.....Jackson
Oleky, Stanley P.....Jackson
O'Meara, James J.....Jackson
Otis, Grant L.....Jackson
Payne, Andrew K.....Jackson
Phillips, G. H.....Jackson
Pier, C. T.....Brooklyn

Porter, Horace W.....Jackson
Pray, Frank F.....Jackson
Pray, George R.....(L) Jackson
Ransom, F. G.....Jackson
Rice, John W.....Jackson
Riley, Philip A.....Jackson
Roberts, Arthur J. (E).....Detroit
Sargent, Leland E.....Jackson
Sautter, William A.....Horton
Schmidt, T. E.....Jackson
Scott, John A.....Jackson
Shaeffer, A. M.....Jackson
Sill, Henry W.....Jackson
Sirhal, Alfred M.....Brooklyn
Smith, Dean W.....Jackson
Southwick, W. A.....Springport
Stewart, L. L.....Jackson
Stone, Ethon L.....Jackson
Sugar, Samuel.....Jackson
Susskind, M. V.....Jackson
Tate, Cecil E.....Jackson
Taylor, Ross V.....Jackson
Thayer, E. A.....Jackson
Thalner, L. F.....Jackson
Thompson, John R.....Manchester
Thompson, Tom.....Jackson
Torwick, E. T.....Jackson
Townsend, J. W.....Jackson
Van Schoick, Frank.....Jackson
Van Schoick, J. D.....Hanover
Van Wagnen, F. I.....Jackson
Vivirski, Edward E.....Jackson
Wallace, Warren S.....Jackson
Wholihan, John W.....Jackson
Wickham, W. A.....Jackson
Wilson, N. D.....(L) Jackson
Winter, George E.....(E) Jackson

Kalamazoo County

Aach, Hugo.....Kalamazoo
Alexander, C. A.....Kalamazoo
Anderson, Glenn C.....Kalamazoo
Andrews, Sherman E.....Kalamazoo
Armstrong, Robert J.....Kalamazoo
Banner, Lawrence R.....Kalamazoo
Barak, Herbert G.....Kalamazoo
Barnabee, J. W.....Kalamazoo
Barrow, Winona M.....Royal Oak
Behan, Gerald W.....Galesburg
Benjamin, Margaret H.....Kalamazoo
Bennett, Charles L.....Kalamazoo
Bennett, Keith F.....Kalamazoo
Berry, J. F.....Kalamazoo
Birch, William G.....Kalamazoo
Bodmer, H. C.....Kalamazoo
Borgman, Wallace.....Kalamazoo
Boys, Charles.....Kalamazoo
Brown, I. W.....Kalamazoo
Burbidge, Earl L.....Kalamazoo
Cobb, Horace R.....Kalamazoo
Cook, R. G.....Kalamazoo
Cooper, Paul F.....Kalamazoo
Crane, W. B.....Kalamazoo
Crawford, Kenneth L.....Kalamazoo
Dahlstrom, Doris E.....Kalamazoo
Dana, Robert L.....Kalamazoo
DeGroat, Albert.....Kalamazoo
DeWitt, L. H. (R).....Kalamazoo
DeWitt, Norman L.....Kalamazoo
Dowd, B. J.....Kalamazoo
Doyle, F. M.....Kalamazoo
Estill, Don Vincent.....(M) Kalamazoo
Farwell, Byron E.....Kalamazoo
Fast, R. B.....Kalamazoo
Fath, August F.....Kalamazoo
Fopeano, John V.....Kalamazoo
Fulkerson, C. B.....(L) Kalamazoo
Fuller, Paul M.....Kalamazoo
Gerstner, Louis W.....Kalamazoo
Gilding, Joseph P.....Vicksburg

Goodhue, Lolita.....Kalamazoo
Grant, Frederick E.....(E) Kalamazoo
Green, William L.....Kalamazoo
Gregg, Sherman.....Kalamazoo
Hayner, R. A.....Kalamazoo
Heersma, H. S.....Kalamazoo
Hildreth, R. C.....Kalamazoo
Hodgeman, Albert B.....Kalamazoo
Hoebke, William G.....Kalamazoo
Holder, Charles O.....Kalamazoo
Howard, H. S.....Kalamazoo
Howard, W. H.....Galesburg
Hubbell, R. J.....Kalamazoo
Huyser, William C.....Kalamazoo
Irwin, William D.....Kalamazoo
Jackson, Howard C.....Kalamazoo
Jackson, John B.....Kalamazoo
Jennings, W. O.....Kalamazoo
Kavanaugh, Wm. R.....Kalamazoo
Kilgore, Robert Nelson.....Kalamazoo
Klerk, W. J.....Kalamazoo
Koestner, Paul A.....Kalamazoo
Lambert, R. H.....Kalamazoo
Lavender, Howard C.....Kalamazoo
Light, Richard Upjohn.....Kalamazoo
Light, S. Rudolph.....Kalamazoo
Littig, John D.....Kalamazoo
MacGregor, J. R.....Kalamazoo
Machin, H. A.....Kalamazoo
Malone, James G.....Kalamazoo
Margolis, Frederick J.....Kalamazoo
Marshall, Don.....Kalamazoo
Marshall, Evelyn W.....Kalamazoo
Marshall, William P.....Kalamazoo
McCarthy, J. S.....Kalamazoo
McNabb, Arthur A.....Watervliet
Meyers, Lewis.....Kalamazoo
Moe, Carl Rex.....Kalamazoo
Morter, Roy A.....Kalamazoo
Nell, Edward R.....(M) Kalamazoo
Neubauer, Darwin W.....Kalamazoo
Nibbelink, Benjamin.....Kalamazoo

Patmos, Martin.....Kalamazoo
Pearson, Edwin O.....Kalamazoo
Peelen, J. W.....Kalamazoo
Peelen, Matthew.....Kalamazoo
Perry, Clifton W.....Kalamazoo
Prentice, Hazel R.....Kalamazoo
Prothro, W. B.....Kalamazoo
Pullon, A. E.....Kalamazoo
Rasmussen, Leo.....Vicksburg
Rigterink, G. H.....Kalamazoo
Rigterink, H. A. (L).....Kalamazoo
Rockwell, Donald C.....Kalamazoo
Russell, Stuart.....Ann Arbor
Ryan, F. C.....Kalamazoo
Sage, E. D.....Kalamazoo
Scholten, D. J.....Kalamazoo
Scholten, Wm.....Kalamazoo
Schrier, C. M.....Kalamazoo
Schrier, Paul C.....Kalamazoo
Schrier, Thomas.....Comstock
Scott, Wm. A.....Kalamazoo
Shackleton, Wm. E. (R).....Kalamazoo
Shook, R. W.....Kalamazoo
Siemens, W. J.....Kalamazoo
Simpson, B. W.....Kalamazoo
Sisk, Wilfred N.....Kalamazoo
Snyder, Roscoe F. (L).....Kalamazoo
Sofen, Morris B.....Kalamazoo
Southworth, M. N.....Schoolcraft
Stiller, A. F.....Kalamazoo
Stryker, Homer H.....Kalamazoo
Upjohn, E. Gifford.....Kalamazoo
Upjohn, L. N.....Kalamazoo
Vander Velde, Kenneth M.....Kalamazoo
Van Urk, Thomas.....(L) Kalamazoo
Verhage, Martin D.....Kalamazoo
Volderauer, John C.....Kalamazoo
Westcott, L. P.....Kalamazoo
Wilbur, E. P.....(E) Kalamazoo
Williamson, Edwin M.....Kalamazoo
Youngs, A. S.....(E) Kalamazoo
Youngs, C. A.....Kalamazoo
Zolen, Margaret H.....Kalamazoo

ROSTER 1948

Kent County

Adams, F. A.....Grand Rapids
Aitken, George T.....Grand Rapids
Albers, G. Donald.....Grand Rapids
Alfenito, Felix S.....Grand Rapids
Allen, R. V.....Grand Rapids
Andre, Harvey M.....Detroit
Avery, Noyes L.....Grand Rapids
Baert, Geo. H.....(E) Grand Rapids
Baker, Abel J.....Grand Rapids
Ballard, M. S.....Grand Rapids
Balyeat, Gordon W.....Grand Rapids
Barris, Ralph W.....Grand Rapids
Beaton, James H.....Grand Rapids
Beeman, Carl B.....Grand Rapids
Beeman, C. E.....Grand Rapids
Beets, W. Clarence.....Grand Rapids
Bell, Charles M.....Grand Rapids
Benjamin, Howard G.....Grand Rapids
Benson, Roland R.....Grand Rapids
Bergsma, Stuart.....Grand Rapids
Bettison, Wm. L.....(M) Grand Rapids
Beukema, Marenus.....Grand Rapids
Billings, Elton P.....(L) Grand Rapids
Blackburn, Henry M.....Grand Rapids
Bloxsom, Paul W.....Grand Rapids
Boelkins, Richard C.....Grand Rapids
Boersma, Donald.....Grand Rapids
Boet, F. A.....Grand Rapids
Boet, John.....Grand Rapids
Bosch, L. C.....Grand Rapids
Botting, A. J.....Byron Center
Brace, Fred.....Grand Rapids
Brayman, C. W.....(L) Cedar Springs
Brink, Russell.....Grand Rapids
Brook, Jacob D.....(L) Grandville
Brotherhood, J. S.....Grand Rapids
Browning, Eugene S.....Grand Rapids
Bruggers, Lawrence.....(M) Phillipine Is.
Buesing, O. R.....(M) Fort Dix, N. J.
Buist, S. J.....Grand Rapids
Bull, Frank L.....Sparta
Burleson, John S.....Grand Rapids
Burling, Wesley M.....Grand Rapids
Burrroughs, Frank.....Grandville
Butler, Wm. J.....Grand Rapids
Byrd, Mary Lou.....Grand Rapids
Campbell, Alex. M.....(E) Grand Rapids
Carpenter, Luther C.....Grand Rapids
Cayce, William.....Grand Rapids
Chamberlain, L. H.....(L) Grand Rapids
Chandler, Donald.....Grand Rapids
Clawson, Carroll K.....Grand Rapids
Claytor, R. W.....Grand Rapids
Collisi, Harrison S.....Cleveland, Ohio
Colvin, W. G.....Grand Rapids
Corbus, Burton R.....Grand Rapids
Crane, Charles V.....Grand Rapids
Crane, Harold D.....Grand Rapids
Currier, F. P.....Grand Rapids
Dales, Ernest W.....Grand Rapids
Damstra, H. J.....Grand Rapids
Davis, D. B.....Grand Rapids
Davis, William H.....Grand Rapids
Dawson, Douglas.....Grand Rapids
Dean, Alfred W.....Grand Rapids
DeBoer, Clarence J.....(M) Grand Rapids
DeBoer, Guy Wm.....Grand Rapids
DeMaagd, Gerald.....Rockford
DeMol, Richard J.....Grand Rapids
Denham, R. H.....Grand Rapids
DePree, Isla G.....Grand Rapids
DePree, Joseph.....Grand Rapids
Deurloo, H. W.....Grand Rapids
DeVel, Leon.....Grand Rapids
DeVries, Daniel.....Grand Rapids
DeWar, M. M.....Grand Rapids
Dewey, Kent A.....Grand Rapids
Dick, Mark W.....Grand Rapids
Diskey, Donald.....Grand Rapids
Doran, Frank L.....Grand Rapids
Droste, James C.....Grand Rapids
DuBois, Wm. J.....(L) Grand Rapids
Ducey, Edward F.....Grand Rapids
Eaton, Robert M.....Grand Rapids
Eggleston, H. R.....Grand Rapids
Fahlund, George.....Grand Rapids
Failing, John F.....Grand Rapids
Farber, Charles E.....Grand Rapids
Faust, L. W.....Grand Rapids
Fellows, Kenneth E.....Grand Rapids
Ferguson, James A.....Ann Arbor
Ferguson, Lynn A.....Grand Rapids
Ferguson, Ward S.....Grand Rapids
Ferrand, Louis G.....Rockford
Fitts, Ralph L.....Grand Rapids

Flynn, J. D.....Grand Rapids
Fochtman, T. W.....Sparta
Foshee, J. C.....Grand Rapids
Frantz, Charles H.....Grand Rapids
Freyling, Robert A.....(M) Grand Rapids
Fuller, E. H.....Grand Rapids
Gamm, Kenneth.....Grand Rapids
Gibbs, F. F.....Grand Rapids
Gilbert, R. H.....Grand Rapids
Gillett, Frederick S.....(M) Grand Rapids
Grant, Lee O.....Grand Rapids
Grant, Lucile R.....Grand Rapids
Grass, Edward J.....Grand Rapids
Gray, Fred B.....Grand Rapids
Graybiel, George.....Caledonia
Griffith, L. S.....Grand Rapids
Haeck, William.....Grand Rapids
Hagerman, D. B.....Grand Rapids
Hammond, T. W.....(R) Grand Rapids
Hayes, Lawrence W., Sr.....Howard City
Hayes, Lawrence W., Jr.....Sand Lake
Heetderks, Dewey.....Grand Rapids
Henry, James, Jr.....Grand Rapids
Herrick, Ruth.....Grand Rapids
Hill, A. Morgan.....Grand Rapids
Hodgen, J. T.....Grand Rapids
Holcomb, J. W.....Grand Rapids
Holdsworth, M. J.....Grand Rapids
Holkeboer, Henry D.....Grand Rapids
Hollander, Stephen.....Grand Rapids
Hoogerhyde, Jack.....Grand Rapids
House, Glenn W.....Grand Rapids
Hufford, A. R.....Grand Rapids
Hunderman, Edward.....Grand Rapids
Hyland, W. A.....Grand Rapids
Jack, William.....Denver, Colo.
Jameson, Fred M.....Grand Rapids
Jaracz, W. J.....Grand Rapids
Jarvis, Charles F.....Grand Rapids
Jellema, J. F.....Grand Rapids
Jones, H. C.....Grand Rapids
Kelly, Edward F.....Grand Rapids
Kemmer, Thomas R.....Grand Rapids
Kendall, Eugene L.....Grand Rapids
Kielhorn, Walter P.....Grandville
Klaus, C. D.....Grand Rapids
Kniskern, P. W.....Grand Rapids
Kooistra, Henry P.....Grand Rapids
Koon, William D.....(M) Detroit
Kremer, John.....(L) Grand Rapids
Kreulen, H. J.....Grand Rapids
Kriekard, P. J.....(L) Grand Rapids
Krupp, C. G.....Grand Rapids
Laird, Robert G.....Grand Rapids
Lanning, N. E.....Grand Rapids
Lentini, Joseph R.....Grand Rapids
Le Roy, Simeon.....Grand Rapids
Liefers, Harry.....Grand Rapids
Lindenfeld, Fred H.....(M) Grand Rapids
List, Carl F.....Grand Rapids
Logie, James W.....Grand Rapids
Lyman, William D.....(L) Grand Rapids
MacDonell, James A.....Lowell
Marsh, John P.....Grand Rapids
Mavnard, Mason S.....Grand Rapids
McCandless, Robert.....Grand Rapids
McCormick, John.....Grand Rapids
McDougal, Wm. J.....Grand Rapids
McDougall, Clarice.....Grand Rapids
McKenna, J. L.....Grand Rapids
McKinlev, L. M.....Grand Rapids
McRae, John H.....Grand Rapids
Meade, Richard H., Jr.....Grand Rapids
Mehney, Gayle H.....Grand Rapids
Miller, J. Duane.....Grand Rapids
Miller, John J.....Marne
Mitchell, W. B.....Grand Rapids
Moen, Cornetta G.....Grand Rapids
Moleski, Joseph.....Grand Rapids
Moleski, Leo T.....Grand Rapids
Moleski, Stanley L.....Grand Rapids
Moll, Arthur M.....Grand Rapids
Morey, Edward C.....Grand Rapids
Mouw, Dirk.....Grand Rapids
Mulder, J. D.....Grand Rapids
Murphy, M. J.....Grand Rapids
Nelson, A. R.....San Francisco, Calif.
Noordewier, Albert.....(L) Grand Rapids
Northouse, Peter B.....Grand Rapids
Notier, Victor.....Grand Rapids
Oliver, W. W.....Grand Rapids
Olson, John R.....Grand Rapids
Osborn, Howard.....Grand Rapids
Paalman, Russell J.....Grand Rapids
Patterson, P. Wilfred.....Grand Rapids

Payne, C. Allen.....Grand Rapids
Pearson, Glenn A.....Grand Rapids
Pedden, J. R., Jr.....Grand Rapids
Plekker, J. D.....Grand Rapids
Posthuma, A. E.....(M) Address Unknown
Posthuma, Millard.....(M) Grand Rapids
Pyle, Henry J.....Grand Rapids
Quirk, Edmund J.....Grand Rapids
Ragsdale, L. V.....Grand Rapids
Ralph, L. Paul.....Grand Rapids
Rasmussen, Richard A.....Grand Rapids
Reed, Torrance.....Grand Rapids
Reus, William F.....Grand Rapids
Rigterink, J. W.....Grand Rapids
Riley, G. L.....Grand Rapids
Robb, Charles S.....Grand Rapids
Roberts, Mortimer E.....(E) Grand Rapids
Robinson, Harold C.....Grand Rapids
Rodgers, William L.....Grand Rapids
Rosenzweig, Leonard.....Grand Rapids
Roth, Emil M.....Grand Rapids
Ryan, John A.....Grand Rapids
Schaubel, Howard J.....Grand Rapids
Schermerhorn, L. J.....Grand Rapids
Schnoor, E. W.....Grand Rapids
Schnute, Louise F.....Grand Rapids
Schuitema, Donald.....Grand Rapids
Sculley, Ray E.....Grand Rapids
Sevensma, Elisha S.....Grand Rapids
Sevensma, Eugene S.....Grand Rapids
Sevey, L. E.....Grand Rapids
Shellman, Millard W.....Grand Rapids
Shepard, B. H.....Lowell
Sherwood, J. Vincent.....Grand Rapids
Sidell, Chester M.....Grand Rapids
Sidell, Richard H.....Grand Rapids
Stemmons, C. G.....(L) Grand Rapids
Shuyter, J. S.....Grand Rapids
Smith, A. B.....Grand Rapids
Smith, Edwin M.....Grand Rapids
Smith, Ferris N.....Grand Rapids
Smith, R. Earle.....Grand Rapids
Smith, Robert B.....Grand Rapids
Snyder, Clarence.....Grand Rapids
Southwick, G. Howard.....Grand Rapids
Steffensen, W. H.....Grand Rapids
Stonehouse, G. G.....Grand Rapids
Stover, Virgil E.....Grand Rapids
Sugg, Cullen E.....Grand Rapids
Sugiyama, Tisuo.....Grand Rapids
Sus Strong, Carl A.....Grand Rapids
Swenson, H. C.....Grand Rapids
Swenson, Leland L.....(M) Grand Rapids
Ten Have, J.....Grand Rapids
Tesseine, A. J.....Grand Rapids
Teusink, J. H.....Cedar Springs
Thompson, A. B.....(E) Grand Rapids
Thompson, Athol B.....Grand Rapids
Thompson, Edw.....Grand Rapids
Thompson, Frank D.....Grand Rapids
Tidey, Marcus B.....Grand Rapids
Tiffany, Jos. C.....Grand Rapids
Torgerson, Wm. R.....Grand Rapids
Truoc, Clarence P.....Grand Rapids
Van Belois, Harvard J.....Grand Rapids
Van Bree, R. S.....Grand Rapids
Vanden Berg, Henry J.....Grand Rapids
Van Duine, H. J.....Grand Rapids
Van Noord, Gelmer A.....Grand Rapids
Vann, Norman S.....Grand Rapids
Van't Hof, A.....Grand Rapids
Van Pernis, Paul A.....Grand Rapids
Van Solkema, Andrew.....Grand Rapids
Van Solkema, Arthur.....Grandville
Van Woerkom, Daniel.....Grand Rapids
Van Zwaluwenburg, Benj. R.....Grand Rapids
Veldman, Harold E.....Grand Rapids
Venema, J. R.....Grand Rapids
Ver Meulen, John.....Wyoming Park
Vining, Keats K., Jr.....Lowell
Vis, William R.....Grand Rapids
Vyn, J. D.....Grand Rapids
Webber, Jerome.....Grand Rapids
Wedgewood, L. G.....Grandville
Wells, Merrill.....Grand Rapids
Wenger, A. V.....Grand Rapids
Wenger, John N.....Coopersville
Whalen, John M.....(M) Grand Rapids
Whinery, Joseph B.....Grand Rapids
Whinery, Joseph F.....Grand Rapids
Willits, P. W.....Grand Rapids
Wilson, Wm. E.....(R) Grand Rapids
Wright, Thomas B.....Grand Rapids
Yegge, J. P.....Kent City

ROSTER 1948

Lapeer County

Allen, Samuel S.....Lapeer
Best, Herbert M.....Lapeer
Bishop, G. C.....Almont
Burley, David H.....(E) Almont
Chapin, Clarence D.....Columbiaville

Clarke, Dorland.....Lapeer
Doty, James R.....Lapeer
McBride, J. R.....Lapeer
Merz, Henry G.....(E) Lapeer
O'Brien, Daniel J.....Lapeer
Palmer, Fred W.....Lapeer

Rehn, Adolph T.....Lapeer
Smith, G. L.....Imlay City
Thomas, J. Orville.....(E) North Branch
Zemmer, H. B.....Lapeer
Zolliker, Carl R.....Imlay City

Lenawee County

Abraham, A. O.....Hudson
Allen, R. A.....Adrian
Beebe, I. J.....Johnston, Pa.
Blair, Thomas H.....Adrian
Blanchard, L. E.....Hudson
Blanden, Merwin R.....Tecomseh
Claxton, W. T.....Britton
Colbath, W. E.....Adrian
DeRyke, Gilbert R.....Adrian
Dickman, Harry M.....Hudson
Dustin, Richard E.....Tecomseh
Hammel, H. H.....Tecomseh
Hardy, P. B.....Tecomseh
Heffron, Charles.....Adrian

Heffron, Howard H.....Adrian
Helzerman, Ralph F.....Tecomseh
Hewes, A. B.....Adrian
Hewes, William.....Adrian
Hinshaw, W. V.....Adrian
Hornsby, W. B.....Clinton
Huntley, H. C.....Adrian
Isley, H. E.....Blissfield
Jewett, Wm. E., Jr.....Adrian
Loveland, Horace H.....Tecomseh
MacKenzie, W. S.....Adrian
McCue, Francis J., Jr.....Adrian
Marsh, R. G. B.....Tecomseh
Mast, W. H.....Tecomseh

Miller, Perry Lynford.....Adrian
Morden, Esli T.....Adrian
Pasternacki, Arthur S.....Adrian
Patmos, Bernard.....Adrian
Purfield, Wm.....Clinton
Raabe, F. C.....Morenci
Rogers, J. D.....Adrian
Sayre, Phillip P.....Onsted
Spalding, I. L.....Hudson
Stafford, Leo.....Adrian
Tubbs, R. V.....Blissfield
Van Dusen, C. A.....Blissfield
Whitehouse, Keith.....Morenci
Wynn, G. H.....Adrian

Livingston County

Clarke, Niles A.....Brighton
Crandell, Claire H.....Howell
Duffy, Ray M.....Pinckney
Fidler, Fred W.....Howell
Finch, E. D.....Howell
Glenn, Bernard H.....Fowlerville

Hendren, J. J.....Fowlerville
Hill, Harold C.....Howell
Huntington, H. G.....Howell
Laboe, Edward W.....Howell
Leslie, G. L.....Pontiac
Lieber, R. W.....Howell

McDowell, Guy M.....Grosse Pte. Woods
Oleen, George G.....Howell
Perry, Florence J. C.....Howell
Rednor, Daniel J.....(A) Howell
Sigler, Hollis L.....Howell
Whitehouse, Walter M.....Howell

Luce County

Campbell, Earl H.....Newberry
Gibson, Robert E.....Newberry

Koss, Frank R.....Newberry
Perry, M. E.....Newberry

Purmort, William R., Jr.....Newberry
Surrell, Mathew A.....Newberry

Macomb County

Allen, Leroy K.....Roseville
Banting, O. F.....Richmond
Barker, John G.....Center Line
Bower, A. B.....Armada
Brady, Milo J.....St. Clair Shores
Bryce, James W.....Centerline
Buckley, D. J.....Mt. Clemens
Croman, Joseph Wm., Jr.....Mt. Clemens
Curlett, James E.....(L) Roseville
Dudzinski, Edmund J.....New Baltimore
Engels, J. A.....Richmond
Heine, Austin W.....Mt. Clemens
Isbey, Edward K.....Center Line
Jewell, James H.....Mt. Clemens
Juliar, Joseph F.....Mt. Clemens

Kane, Wm. J.....Mt. Clemens
Lane, W. D.....Romeo
Lynch, Russell.....Center Line
Maguire, A. J.....Utica
Miller, Sidney S.....East Detroit
Moore, G. F.....Mt. Clemens
Mulligan, P. T.....Mt. Clemens
Morgan, Parker B.....Utica
Reichman, Joseph J.....Mt. Clemens
Reitzel, R. H.....Mt. Clemens
Rivard, Charles L.....Grosse Pointe Woods
Roth, G. E.....Detroit
Rothman, A. M.....East Detroit
Ruedisueli, Clarence A.....Roseville
Salot, R. F.....Mt. Clemens

Scher, Joseph N.....Mt. Clemens
Scher, Sydney.....Mt. Clemens
Siegfried, E. G.....New Haven
Singer, Nelson.....East Detroit
Smith, Milton C.....Mt. Clemens
Stone, Elizabeth A.....Romeo
Stryker, O. D.....Mt. Clemens
Sturm, Fred A.....St. Clair Shores
Thompson, A. A.....Mt. Clemens
Ullrich, R. W.....Mt. Clemens
Wellard, Henry C.....New Baltimore
Whitley, Alec.....St. Clair Shores
Wilde, M. M.....Warren
Wiley, D. Bruce.....Utica
Wolfson, Victor H.....Mt. Clemens

Manistee County

Grant, C. L.....Manistee
Hansen, E. C.....Manistee
Konopa, John F.....Manistee
Lalime, Ruth E.....Bear Lake
Lewis, Lee A.....(E) Manistee

MacMullen, Harlen.....(R) Manistee
Miller, E. B.....Manistee
Murphy, Frank E.....Cadillac
Norconk, Ward H.....Bear Lake
Oakes, Ellery A.....Manistee

Ogilvie, G. D.....Manistee
Quinn, Henry M.....Copenish
Ramsdell, Homer A.....Manistee
Rowe, Robert E.....Manistee
Switzer, Lars W.....Manistee

Marquette-Alger Counties

Acocks, J. R.....Marquette
Baron, Benzoine C.....Munising
Bennett, Arthur K.....Marquette
Bennett, M. C.....Marquette
Berry, Robert F.....Marquette
Bertucci, J. P.....Ishpeming
Burke, R. A.....Negaunee
Casler, W. L.....Marquette
Cooperstock, M.....Marquette
Corcoran, W. A.....Ishpeming
Drury, Chas. P.....Marquette
Elzinga, Eugene R.....Marquette
Erickson, Arvid W.....Ishpeming

Fennig, F. A.....Marquette
Green, Southgate J.....Gwinn
Harsh, R. C.....Pontiac
Hirwas, C. L.....Marquette
Hornbogen, D. P.....Marquette
Howe, L. W.....Marquette
Keskey, George I.....Marquette
Knudson, George.....Negaunee
Lambert, W. C.....Marquette
LeGolian, C.....Marquette
Lyons, James.....(M) Marquette
McCann, Neal J.....Marquette
Mudge, W. A.....Negaunee
Narotzky, Archie S.....Ishpeming

Nicholson, J. B.....Marquette
Paine, Raymond Lee.....Negaunee
Robbins, Nelson J.....(L) Negaunee
Schweinsberg, Sara D.....Marquette
Serbst, Charles.....Marquette
Sicotte, Isaiah.....Michigamme
Swinton, A. L.....Marquette
Talso, Jacob.....Ishpeming
Tearnan, Raymond A.....Munising
Van Riper, Paul.....(L) Champion
Waldie, George McLeod.....Ishpeming
Wickstrom, Geo.....Munising
Williams, R. G.....Ishpeming

ROSTER 1948

Mason County

Blanchette, Victor J.....Scottville
Boldyreff, Ephraim.....Custer
Comodo, Nicholas M.....Ludington
Fenneman, Robert J.....Scottville

Goulet, L. J.....Ludington
Hoffman, Howard.....Ludington
Lintner, Roy C.....Ludington
Martin, Wm. S.....Ludington

Ostrander, R. A.....Ludington
Paukstis, Charles.....Ludington
Scott, Robert Redvers.....Ludington
Slaybaugh, J. C.....Ludington

Mecosta-Osceola-Lake Counties

Bruggema, Jacob.....Evart
Chess, Leo F.....Reed City
Franklin, Benjamin L.....Remus
Ikovich, Paul.....Reed City
Kilmer, David.....Reed City

Kilmer, Paul B.....Reed City
Kowaleski, Edward.....Remus
Merlo, F. A.....Big Rapids
Mitchell, H. C.....Big Rapids
Nelson, Lorenzo.....Baldwin

Treynor, Thomas P.....Big Rapids
Van Auker, Edward A.....Big Rapids
White, J. A.....Big Rapids
Yeo, Gordon H.....Big Rapids

Medical Society of North Central Counties

Boehm, John D.....(R) West Branch
Clippert, C. G.....Grayling
Coulter, Keith Douglas.....Gladwin
Drescher, Geo. A.....Lewiston
Egle, Joseph L.....Gaylord

Forney, F. A.....Gaylord
Hasty, Earl.....West Branch
Jardine, Hugh M.....West Branch
Keyport, C. R.....Grayling
Libke, Robert.....Gaylord
Martzowka, M. A.....Roscommon

McDowell, D. B.....West Branch
McKillop, G. L.....Gaylord
Palm, Geo.....Prudenville
Peckham, Richard.....Gaylord
Stealy, Stanley.....Grayling

Menominee County

Brukardt, Herman R.....Menominee
Clark, E. R.....Powers
DeWane, F. J.....Menominee
Dewane, James N.....(M) Menominee
Flanagan, Clarence B.....Menominee

Glickman, L. Grant.....Marinette, Wis.
Heidenreich, John R.....Daggett
Jones, Wm. S.....Menominee
Kaye, J. T.....Menominee
Kerwell, K. C.....Stephenson

Peterson, A. R.....Daggett
Sawbridge, Edward.....(E) Stephenson
Schroeder, J. M.....Menominee
Sethney, Henry T.....Menominee
Towey, J. W.....Powers

Midland County

Ballmer, Robert S.....Midland
Bowler, Robert E.....Midland
Bulmer, Dan J.....Midland
Buskirk, Maurice D.....Midland
Cronmeyer, William H.....Midland
Gay, Harold H.....Midland

Gordon, Harold L.....Midland
Grewe, N. C.....Midland
Hautau, Emily.....Midland
High, C. V., Jr.....Midland
Howe, Irvin M.....Midland
Ittner, Martin.....Midland
Linsenman, Karl W.....Midland

MacCallum, Charles.....Midland
Maynard, W. A.....Coleman
Meisel, Edward H.....Midland
Pike, Melvin H.....Midland
Sherk, J. H.....Midland
Towsley, W. D.....Midland

Monroe County

Acker, Wm. F.....Monroe
Ames, Florence.....Monroe
Barker, Vincent L.....Monroe
Blakey, L. C.....Monroe
Bond, W. W.....Monroe
Cigany, Zoltan B.....Carleton
Dusseau, S. V.....(E) Erie
Ewing, R. T.....Monroe
Flanders, J. P.....Monroe
Frory, R. A.....Monroe
Gelhaus, Wm. J.....Monroe

Golinvaux, C. J.....Monroe
Hensel, Hilda.....Monroe
Hunter, M. A.....Monroe
Johnson, A. Esther.....Monroe
Kelso, Newton S., Jr.....Monroe
Landon, Herbert W.....Monroe
Long, Edgar C.....Monroe
Long, Sara.....Monroe
Mather, C. B.....Monroe
McDonald, T. A.....Monroe
McGeoch, R. W.....Monroe

McMillin, J. H.....Monroe
Meck, H. L.....Dundee
Newcomer, Sheldon R.....Monroe
Parmelee, O. E.....Lambertville
Pinkus, Hermann.....Monroe
Reisig, A. H.....Monroe
Sanger, Emerson J.....Monroe
Wagar, Spencer.....Rockwood
Williams, Robert J.....Monroe
Williamson, G. W.....Dundee

Muskegon County

Anderson, A. J.....Muskegon
Anderson, Axel W.....Lakewood Club
August, R. V.....Muskegon Heights
Bailey, Robert S.....Muskegon
Barnard, Helen.....Muskegon
Benedict, A. L.....Muskegon
Bloom, C. J.....Muskegon
Boyd, D. R.....Muskegon
Boyd, Jack L.....(A) Muskegon
Bradshaw, Park S.....Muskegon
Chapin, Wm. S.....(A) Muskegon Heights
Christophersen, J. W.....Muskegon
Clapp, Henry W.....Muskegon
Cohan, Sol G.....Muskegon
Dasler, A. F.....Muskegon
Derezinski, Clement F.....Muskegon
Diskin, Frank.....Muskegon
Douglas, Robert.....Muskegon
Durham, C. J.....Muskegon
Dykhuizen, Harold D.....Muskegon
Eckerman, C. T.....Muskegon
Fillingham, Enid.....Muskegon
Fleischmann, C. B.....Muskegon
Fleishman, Norman.....Muskegon
Foss, Ed. O.....Muskegon
Gaikema, E. W.....Muskegon
Garber, F. W., Jr.....Muskegon

Gillard, James.....Muskegon
Goltz, Martha.....Montague
Greene, Henry Phillip.....Muskegon
Griffith, Robert M.....Muskegon
Hagen, William A.....Muskegon
Hanley, William J.....Muskegon
Hannum, F. W.....Muskegon
Harrington, A. F.....Muskegon
Hartwell, S. W.....Muskegon
Heneveld, Edw. H.....Muskegon
Heneveld, John.....Muskegon
Holly, Leland E.....Muskegon
Holmes, Roy Herbert.....Muskegon
Joistad, A. H.....Muskegon
Jiroch, John T.....Muskegon
Kane, Thomas J.....Muskegon
Kav. Cecilia.....Muskegon
Keilin, Marie.....Muskegon
Kerr, H. J.....Muskegon
Lange, E. W.....Muskegon
Lauretti, Emil.....Muskegon
Laurin, V. Samuel.....Muskegon
LeFevre, Louis.....Muskegon
LeFevre, Wm. M.....Muskegon
Loder, Leonel Lewis.....Muskegon
Loomis, John L.....Muskegon
Mandeville, C. B.....Muskegon

Medema, Paul.....Muskegon
Meengs, M. B.....Muskegon
Miller, Philip L.....Muskegon
Morford, F. N.....Muskegon
Mulligan, A. W.....Muskegon
Oden, Constantine L.....Muskegon
Petkus, Antonie.....Muskegon Heights
Pettis, Emmett.....Muskegon
Powers, Lunette.....(E) Muskegon
Price, Leonard.....Muskegon
Pyle, H. J.....Muskegon
Risk, R. A.....Muskegon
Risk, Robert D.....Muskegon
Scholle, Norbert.....Muskegon
Sears, Richard.....Muskegon
Shebasta, Emil.....Muskegon
Smith, M. Luther.....Muskegon
Swartout, W. C.....Muskegon
Teifer, Charles A.....Muskegon
Theime, S. W.....Ravenna
Thornton, E. S.....Muskegon
Toy, Charles.....Muskegon
Vanderlaan, John E.....Muskegon
Wagenaar, E. H.....Muskegon
Wiersma, Silas C.....Muskegon
Wilke, C. A.....Montague
Williams, E. V.....Muskegon Heights
Wilson, P. S.....Muskegon

Newaygo County

Cook, J. Maxwell.....White Cloud
Deur, T. R.....Grant
Geerlings, Lambert.....Fremont

Geerlings, Ralph Willis.....Fremont
Harris, Dean W.....Fremont
Klein, J. Paul.....Fremont
Masters, Brooker L.....Fremont

Moore, H. R.....Newaygo
O'Neill, J. W.....White Cloud
Tompsett, Arthur C.....Hesperia

ROSTER 1948

Northern Michigan

Albi, Robert J.....Boyne City
 Alm, Bernhard T.....Potoskey
 Blum, Benj. B.....Potoskey
 Burns, Dean C.....Potoskey
 Chapman, Willis Earl.....(E) Cheboygan
 Conkle, Guy C.....Boyne City
 Conti, Joseph.....Potoskey
 Conway, Wm. S.....Potoskey
 Duffie, Don Hastings.....Central Lake
 Elliott, E. James.....Boyne City

Gervers, J. H. R.....Bellaire
 Grate, L.....Charlevoix
 Hegener, A. J.....Potoskey
 Larson, Walter E.....Cheboygan
 Lashmet, Floyd H.....Potoskey
 Lentini, Nicholas.....Cheboygan
 Lilga, Harris V.....Potoskey
 Litzzenburger, A. F.....Boyne City
 Mayne, Frederick C.....Cheboygan
 McClintock, Robert S.....Charlevoix

Palmer, Russell.....St. James
 Parks, W. H.....Potoskey
 Rodger, John.....Bellaire
 Saltonstall, Gilbert B.....Charlevoix
 Savory, John H.....East Jordan
 Stringham, J. R.....Cheboygan
 Van Dellen, Jerrian.....East Jordan
 Van Helder, Harry.....Boyne City
 Weeber, Kathryn.....Potoskey
 Wood, George H.....Onaway

Oakland County

Abbott, V. C.....Pontiac
 Adams, Frederick M.....Birmingham
 Arnkoff, Harry.....Pontiac
 AschenBrenner, Z. R.....Farmington
 Baker, Robert H.....Pontiac
 Bannow, Robert J.....Pontiac
 Barker, Howard B.....Pontiac
 Bauer, Edward G.....Pontiac
 Bauer, Ernest G.....Hazel Park
 Beattie, W. G.....Ferndale
 Beck, Otto O.....Birmingham
 Blakeney, James R.....Auburn Heights
 Blue, Jane.....Elizabeth Lake
 Boucher, R. E.....Royal Oak
 Burke, Chauncey G.....Pontiac
 Butler, Samuel A.....Pontiac
 Calhoun, Ethel T.....Birmingham
 Campbell, Malcolm D.....Ferndale
 Cefai, A. F.....Pontiac
 Christie, Edward.....Pontiac
 Christie, J. W.....Pontiac
 Cobb, Leon F.....Pontiac
 Cobb, Thomas H.....Pontiac
 Collins, Edward F.....Pontiac
 Cooper, Robert J.....Pontiac
 Cooley, Roy V., Jr.....Pontiac
 Couche, Henry O.....Birmingham
 Crissman, Harold C.....Ferndale
 Cudney, Ethan B.....Pontiac
 Currier, R. Keith.....Pontiac
 Dahlgren, Carl.....Keego Harbor
 Darling, C. G., Jr.....Pontiac
 Deutsch, Wm. L.....Huntington Woods
 Dobski, Edwin J.....Pontiac
 Dunlap, Gregg L.....Keego Harbor
 Dunn, Lewis E.....Berkley
 Ekelund, Clifford T.....Pontiac
 Endress, Zac.....Pontiac
 Farnham, Lucius Augustine.....Pontiac
 Ferris, Ralph G.....Birmingham
 Fitzpatrick, Francis.....Pontiac
 Flick, Earl J.....Royal Oak
 Flick, John R.....Royal Oak
 Foust, Earl W.....Hazel Park
 Furlong, Harold A.....Pontiac
 Gaensbauer, Ferdinand.....Pontiac
 Garipey, Bernard F.....Royal Oak
 Gatley, C. R.....Pontiac
 Gatley, L. Warren.....Pontiac
 Gehringer, Norman F.....Pontiac
 Geib, Ormond D.....Rochester
 Gerls, Frank B.....Pontiac
 Gibson, James C.....(E) Milford

Gibson, Wellington C.....Pontiac
 Gill, Matthew J.....Pontiac
 Grant, William A.....Milford
 Green, James D.....Birmingham
 Green, Wm. M.....Pontiac
 Hackett, Daniel Jos.....Pontiac
 Haddock, D. A.....Pontiac
 Hageman, George.....Bloomfield Hills
 Halsted, Lee H.....Farmington
 Hammonds, E. E.....Birmingham
 Harvey, Campbell.....Pontiac
 Hasner, Robert B.....Royal Oak
 Hassberger, J. B.....Birmingham
 Hathaway, Clarence L.....Lake Orion
 Hathaway, William.....Rochester
 Henry, Colonel R.....Ferndale
 Hensley, C. B.....Lake Orion
 Howlett, E. V.....Pontiac
 Hubert, John R.....Pontiac
 Hurst, Daniel D.....Pleasant Ridge
 Hutchinson, W. G.....(L) Pontiac
 Kemp, Felix J.....Pontiac
 Kemp, W. Lloyd.....Birmingham
 Koehler, William B.....Royal Oak
 Lambie, John S.....Birmingham
 Lambert, Alvin Gerald.....Ferndale
 Larson, Alvin R.....Pontiac
 Lewis, S. M.....Ferndale
 Lockwood, C. E.....Holly
 Mackenzie, O. R.....Walled Lake
 Margrave, Edmund C.....Royal Oak
 Markley, John Martin.....Pontiac
 Mason, Robert J.....Birmingham
 McConkie, J. P.....Birmingham
 McEvoy, Francis J.....Royal Oak
 McNeill, H. H.....Pontiac
 Mehas, C. P.....Pontiac
 Meinke, Herman A.....Hazel Park
 Mercer, Frank A.....Pontiac
 Merrill, Lionel N.....Royal Oak
 Mershon, R. B.....Royal Oak
 Miller, Hazel L.....Royal Oak
 Miller, Sidney.....Birmingham
 Mitchell, B. M.....Pontiac
 Monroe, John D.....Pontiac
 Morton, James A.....Pontiac
 Neafie, Chas. A.....Pontiac
 Newcomb, Arnold B.....Berkley
 Norup, John.....Berkley
 Nosanchuk, Joseph.....Pontiac
 Olsen, Richard E.....Pontiac
 Palmer, Hayden.....Pontiac
 Pauli, Theodore H.....Pontiac

Payton, Charles F.....Royal Oak
 Pelletier, Charles J.....Hazel Park
 Petroff, George N.....Pontiac
 Porritt, Ross J.....Pontiac
 Ports, Preston W.....Farmington
 Prevette, Isaac C.....Pontiac
 Quarton, Albert E.....Birmingham
 Raynale, George P.....Birmingham
 Reid, Fred T.....Clawson
 Riggs, Harry L.....Pontiac
 Riker, Aaron D.....Pontiac
 Roehm, Harold.....Birmingham
 Rowley, Laurie G.....Drayton Plains
 Rupp, Edson C.....Royal Oak
 Russell, Vincent P.....Royal Oak
 Ruva, Joseph.....Pontiac
 St. John, Harold A.....Pontiac
 Schlechte, Carl.....Rochester
 Schoenfeld, John B.....Birmingham
 Schuneman, Howard.....Ferndale
 Seaborn, A. J.....Royal Oak
 Shadley, Maxwell.....Pontiac
 Sheffield, L. C.....Pontiac
 Sibley, H. A.....Pontiac
 Simpson, E. K.....Pontiac
 Smith, Carleton A.....Pontiac
 Smith, Donald S.....Pontiac
 Smith, Ellen.....Pontiac
 Smith, George E.....Royal Oak
 Spencer, Lloyd H.....Royal Oak
 Spoehr, Eugene L.....Ferndale
 Spohn, Earl W.....Royal Oak
 Stageman, John Condon.....Pontiac
 Stahl, Harold F.....Oxford
 Stanley, Wm. F.....Ferndale
 Starker, Clarence T.....Pontiac
 Steffes, Everette.....Berkley
 Steinberg, Norman.....Royal Oak
 Stolpman, A. K.....Birmingham
 Sutton, Palmer E.....Royal Oak
 Swickle, Edward F.....Clawson
 Tauber, A.....Pontiac
 Tuck, Raymond G.....Pontiac
 Uloth, Milton J.....Ortonville
 Van Haltern, H. L.....Pontiac
 Wagner, Ruth E.....Royal Oak
 Wake, Douglas L.....Royal Oak
 Watson, Thomas Y.....Birmingham
 Wessels, Robert R.....Birmingham
 Wigent, Ralph D.....Pontiac
 Williams, John P.....Pontiac
 Young, Arthur R.....Pontiac

Oceana County

Flint, Charles.....Hart
 Hasty, Willis A.....Shelby
 Hayton, A. R.....Shelby

Heard, Wm.....Pentwater
 Munger, L. P.....(E) Hart
 Nicholson, John H.....(E) Hart

Reetz, Fred A.....(A) Shelby
 Robinson, W. Gordon.....Hart
 Wood, Merle G.....Hart

Ontonagon County

Bender, Jesse L.....Mass

Hogue, H. B.....Ewen
 Rubinfeld, S. H.....Ontonagon

Strong, W. F.....Ontonagon

Ottawa County

Barrett, C. Dale.....Grand Haven
 Beernink, E. H.....Grand Haven
 Bloemendaal, D. C.....Zeeland
 Blomendal, W. B.....Grand Haven
 Boone, Cornelius E.....Zeeland
 Bulthuis, Jerry E.....Jamestown
 Clark, Nelson H.....Holland
 Cook, Carl S.....Holland
 DeVries, H. G.....Holland
 DeYoung, Fred.....Spring Lake
 Hager, Ralph.....Hudsonville
 Hamelink, H. M.....Holland

Harms, H. P.....Holland
 Kemme, Gerrit.....Zeeland
 Kitchel, John.....Grand Haven
 Kitchel, Mary.....Grand Haven
 Kools, William Clarence.....Holland
 Leenhouts, Abraham.....(E) Holland
 Long, C. E.....Grand Haven
 Nichols, Rudolph H.....Holland
 Nykamp, Russell.....Zeeland
 Presley, Wm. J.....(L) Grand Haven
 Rypkema, Willard M.....Grand Haven
 Schaltenaar, R. H.....Holland

Schrick, Edna C.....Holland
 Ten Have, Ralph.....Grand Haven
 Timmerman, E. C.....Coopersville
 Van Appiedorn, C. J.....Holland
 Van Der Berg, E.....Holland
 Van Kolken, P. J.....Grand Haven
 Vander Velde, O.....Holland
 Wells, Kenneth.....Spring Lake
 Westrate, William.....Holland
 Winter, John K.....Holland
 Winter, Wm. G.....Holland
 Yonkman, F. F.....Madison, N. J.

ROSTER 1948

Saginaw County

Ackerman, G. L. Saginaw
Anderson, W. K. Saginaw
Bagley, U. S. Saginaw
Berberovich, T. F. Saginaw
Brender, Fred P. Frankenmuth
Brock, W. H. (L) Saginaw
Bruton, Martin F. Saginaw
Bucklin, Robert. Saginaw
Bullington, Bert Montell. Saginaw
Busch, Frank J. Saginaw
Butler, M. G. Saginaw
Button, A. C. Saginaw
Cady, F. J. Saginaw
Cameron, Allen K. Saginaw
Campbell, L. A. Saginaw
Catzone, Roy J. Merrill
Chisena, Peter R. Bridgeport
Clark, Wilbert. (L) Kenmore, N. Y.
Claytor, A. A. Saginaw
Cody, Frederick J. Saginaw
Cortopassi, Andre. Saginaw
Cortopassi, V. E. Saginaw
Cory, C. W. Saginaw
Curtis, James. Saginaw
Durman, Donald C. Saginaw
Ely, C. W. Saginaw
Ernst, Arthur R. Saginaw
Eymier, Esther. Saginaw
Fleschner, Thomas E. Birch Run
Galsterer, Edwin C. Saginaw
Gardner, Joe H. Saginaw
Goman, Louis D. Saginaw
Grigg, Arthur. (E) Saginaw
Grigg, Arthur P. Saginaw

Hand, Eugene A. Saginaw
Helmkamp, H. O. Saginaw
Hester, E. G. Saginaw
Hohn, Fred, Jr. Saginaw
Howell, Don M. Saginaw
Jaenichen, R. Saginaw
Jiroch, R. S. Saginaw
Jordan, Leo A. Saginaw
Kemp, J. N. (L) Saginaw
Kempston, R. M. Saginaw
Kerr, William. Saginaw
Keyes, James T. Birch Run
Kirchgeorge, Clemens G. Frankenmuth
Kleekamp, Herbert G. Saginaw
Klippen, Arthur J. Saginaw
Kowals, F. V. Saginaw
La Porte, Lawrence A. Saginaw
Ling, Ernest M. Hemlock
Ling, Kenneth C. Hemlock
Lohr, O. W. Saginaw
Longstreet, Martha L. Saginaw
Luger, F. E. Saginaw
Lyle, R. C. Bridgeport
MacKinnon, Edwin D. Saginaw
MacMeekin, James Ware. Saginaw
Manning, John E. Saginaw
Martzowka, Wm. F. Saginaw
Matthews, Harry C. Saginaw
Maurer, John A. Saginaw
Mavne, Harold. Saginaw
McKinney, Alex R. (L) Saginaw
McLandress, Joshua A. (L) Saginaw
Meyer, Henry J. (E) Saginaw
Mikan, V. Robert. Saginaw

Morgrette, Leonard. Saginaw
Murphy, Albert P. Saginaw
Murray, M. J. Saginaw
Nelson, Oscar A. Saginaw
Nicholas, Mildred. Saginaw
Northway, Robert O. Saginaw
Novy, F. O. Saginaw
Olson, Porter. Saginaw
Ostrander, Frank W. Freeland
Phillips, Homer A. Saginaw
Pietz, Frederick. Saginaw
Pillsbury, Edward A. Frankenmuth
Poole, Frank A. (L) Saginaw
Richards, Ned W. Saginaw
Richter, Harry J. Saginaw
Ryan, M. D. (E) Saginaw
Ryan, R. S. Saginaw
Sample, J. T. Saginaw
Sargent, D. V. Saginaw
Schaiberger, Elmer G. Saginaw
Sharp, Martin C. Saginaw
Sheldon, S. A. Saginaw
Siler, Delbert E. Saginaw
Skowronski, Casimer A. Saginaw
Slack, Walter K. Saginaw
Stahly, Edward H. Saginaw
Stander, A. C. Saginaw
Stewart, George W. Saginaw
Toshach, C. E. Saginaw
Volk, V. K. Saginaw
Wallace, Herbert C. Saginaw
Westlund, Norman. Saginaw
Wilson, H. Roy. (R) Saginaw
Yntema, S. Saginaw

Sanilac County

Blanchard, E. W. Deckerville
Ellis, N. J. Croswell
Gift, W. A. Marlette
Hart, R. K. Croswell

Lance, Paul E. Marlette
Learmont, H. H. Croswell
McCrea, John W. Marlette
McGuegle, K. T. Sandusky
Ruhl, Frank. Croswell

Seager, M. Cole. Brown City
Tweedie, G. Evans. Sandusky
Tweedie, S. Martin. Sandusky
Webster, John C. Marlette

St. Clair County

Armsbury, A. B. Marine City
Attridge, J. A. (L) Port Huron
Banting, K. C. Port Huron
Battley, J. C. Sinclair. Port Huron
Beck, Frank K. Port Huron
Beer, Joseph F. St. Clair
Benjamin, Clayton C. Port Huron
Biggar, R. J. Port Huron
Borden, C. L. Port Huron
Boughner, W. H. Algonac
Bovee, M. E. Port Huron
Bowden, W. S. Marine City
Brush, Howard O. Port Huron
Burley, Jacob H. Port Huron
Carey, Lewis H. Port Huron
Clyne, B. C. Yale

Cooper, T. H. Port Huron
De Gurse, T. E. Marine City
Fitzgerald, E. W. Port Huron
Hall, W. E. B. Port Huron
Hazelidine, Herbert J. Port Huron
Hoyt, Charles M. Port Huron
Kest, Geo. Matthew. Port Huron
Kirker, F. O. St. Clair
Lauridsen, James. Port Huron
LeGalle, K. B. Port Huron
Licker, R. R. Port Huron
Love, James M. Port Huron
Ludwig, Claude A. Port Huron
Ludwig, F. E. Port Huron
Martin, C. S. Port Huron
McColl, D. J. (E) Port Huron
MacPherson, C. A. St. Clair

Meredith, E. W. Port Huron
Novak, Walter S. Port Huron
Patterson, D. Webster. Port Huron
Pollock, Donald A. Yale
Prather, Frank W. Yale
Sanderson, Joseph L. Port Huron
Schaefer, W. A. Port Huron
Sites, E. C. Port Huron
Thomas, C. F. Port Huron
Tomsu, Glenn F. Yale
Treadgold, Douglas. Port Huron
Vroman, M. E. Port Huron
Ware, John R. Port Huron
Wass, Henry C. St. Clair
Waters, George. Port Huron
Wetzel, John O. Port Huron

St. Joseph County

Berg, Lawrence A. Sturgis
Blood, J. V. Three Rivers
Braham, Wilbur. Sturgis
Brunson, A. E. Sturgis
Fiegel, S. A. Sturgis
Fortner, R. J. Three Rivers
Gillespie, E. Sturgis
Hoekman, Aben. Constantine
Holm, Arvid G. Three Rivers

Hoyt, Howard P. Colon
McGrath, Neill B. Three Rivers
Miller, C. G. Sturgis
Myer, Clifton G. White Pigeon
Olney, H. E. Leonidas
Parrish, Marion. Sturgis
Pennington, H. C. White Pigeon
Penzotti, Stanley. Three Rivers
Porter, C. G. Three Rivers
Raisch, Fred J. White Pigeon

Reed, Fred R. Three Rivers
Shaw, George D. Mendon
Sheldon, J. P. Sturgis
Slote, L. K. Constantine
Springer, R. A. Centerville
Sweetland, G. J. Constantine
Tesar, F. J. Centerville
Weir, Dale C. Three Rivers
Zimont, R. D. Constantine

Shiawassee County

Arnold, Alfred L. Owosso
Backe, John C. Gaylord
Bennett, George W. Elsie
Brown, Richard J. Owosso
Buzzard, Walter Davenport. Chesaning
Chipman, E. M. Owosso
Dillon, James. Perry
Fillinger, W. B. Ovid

Harkness, C. A. Owosso
Hoshal, Vern L. Durand
Hume, Arthur M. (E) Owosso
Hume, Harold A. Owosso
Janci, Julius. Owosso
McKnight, E. R. Owosso
Merz, W. L. Owosso
Parker, W. T. Owosso
Pochert, R. C. Owosso

Richards, C. J. Durand
Shalmark, J. F. Owosso
Shepherd, W. F. Owosso
Slagh, E. M. Elsie
Smith, Frank W. Owosso
Watts, Fred A. Owosso
Weinkauf, W. F. Corunna
Weston, C. L. Owosso

Tuscola County

Ballard, James H. Cass City
Barbour, Harry A. Mayville
Bates, George. (E) Kingston
Berman, Harry. Millington
Cook, Raymond. Akron
Dickerson, Willard W. Caro
Dixon, Robert L. Caro

Donahue, H. Theron. Cass City
Flett, Richard O. Millington
Gugino, Frank James. Reese
Howlett, R. R. Caro
Kaven, G. H. Unionville
Merrill, Elmer H. Caro
Morris, Frank L. Cass City
Nigg, Herbert L. Caro

Pelczar, Walter. Unionville
Ruskin, D. B. Caro
Savage, Lloyd L. Caro
Shoemaker, J. Vassar
Starmann, Bernard. Cass City
Swanson, E. C. Vassar
Von Renner, Otto. Vassar

ROSTER 1948

Van Buren County

Boothby, Carl F.....Lawrence
Boothby, F. M.....Lawrence
Boothby, Paul R.....Lawrence
Bope, William P.....(E) Decatur
Buckborough, M. W.....South Haven
Diephuis, Bert.....South Haven
French, Merle R.....Paw Paw

Gano, Avison.....Bangor
Giffen, John R.....(E) Bangor
Greenman, Newton H.....Decatur
Hoyt, W. F.....(E) Paw Paw
Itzen, J. F.....South Haven
Maxwell, J. Charles.....(E) Paw Paw
McFadden, R. I.....Bloomington
Penoyar, C. L.....South Haven

Ralyea, John R.....Paw Paw
Roberts, M. S.....South Haven
Spalding, R. W.....Gobles
Steele, Arthur H.....Paw Paw
Ten Houton, Charles.....Paw Paw
Terwilliger, Edwin.....South Haven
Urist, Martin J.....South Haven
Young, William R.....Lawton

Washtenaw County

Alexander, John.....Ann Arbor
Allen, Arthur W.....(M) Ann Arbor
Asher, Wm. M.....(M) Ann Arbor
Badgley, Carl E.....Ann Arbor
Barker, Paul.....Ann Arbor
Barnwell, John B.....Washington, D. C.
Barry, George R.....(M) Ann Arbor
Barss, Harold D.....Ypsilanti
Barss, William A.....Ypsilanti
Bass, Thomas J.....Ypsilanti
Bassett, Robert C.....Ann Arbor
Bassow, Paul H.....Ann Arbor
Bates, Wm. H.....Cottonwood, Ariz.
Bauer, Jere M.....Ann Arbor
Baugh, R. H.....Ypsilanti
Beebe, Hugh M.....Ann Arbor
Beierwaltes, Wm. H.....Ann Arbor
Bell, Margaret.....Ann Arbor
Belser, Walter.....Ann Arbor
Benz, Carl A.....Ann Arbor
Berry, Robert E. L.....(M) Ann Arbor
Bethel, Frank Hartstuf.....Ann Arbor
Bohne, A. Waite.....Ann Arbor
Brace, William M.....Ann Arbor
Britton, H. B.....Ypsilanti
Brown, Philip N.....Ypsilanti
Brownlee, Wm. M.....(M) Ann Arbor
Burkett, Howard M.....Ann Arbor
Buscaglia, C. J.....Ypsilanti
Buxton, Robert W.....Ann Arbor
Byrn, Robert W.....(M) Ann Arbor
Camp, Carl Dudley.....Ann Arbor
Campbell, Kenneth N.....Ann Arbor
Cawley, Edward P.....Ann Arbor
Chrest, Clarence P.....(M) Ann Arbor
Clarke, Robert B.....Ann Arbor
Clements, Glenn T.....Ann Arbor
Clyde, Ensign E.....Plymouth
Coller, Frederick A.....Ann Arbor
Collins, James I.....(M) Ann Arbor
Comper, Dolphus E.....(M) Ann Arbor
Conn, Jerome W.....Ann Arbor
Cooper, Donald R.....(M) Pittsfield Village
Coxon, A. Wm.....Ann Arbor
Crook, Clarence E.....Ann Arbor
Cummings, H. H.....Ann Arbor
Curtis, Arthur C.....Ann Arbor
Dalton, Arthur M.....(M) Ann Arbor
DeJong, Russell.....Ann Arbor
DeTar, John S.....Milan
DeWeese, Marion S.....(M) Ann Arbor
Dingman, Reed O.....Ann Arbor
Dollin, W. E.....Ann Arbor
Donaldson, S. W.....Ann Arbor
Donovan, Eugene T.....(M) Ypsilanti
Drolett, Donald J.....(M) Ann Arbor
Duff, Ivan F.....(M) Ann Arbor
Edward, Aaron R.....Pittsfield Village
Engelke, Otto K.....Ann Arbor
Everett, Meldon.....Ann Arbor
Falls, Harold F.....Ann Arbor
Fink, George C.....Ann Arbor
Fish, Robert G.....(M) Ann Arbor
Forsythe, Warren E.....Ann Arbor
Fralick, F. Bruce.....Ann Arbor
Francis, Thomas, Jr.....Ann Arbor
Frost, Lyle W.....Ypsilanti
Frye, Carl H.....Ann Arbor
Fulton, John K.....(M) Ann Arbor
Furstenberg, Albert C.....Ann Arbor
Ganzhorn, Edwin.....Ann Arbor
Gates, John L.....Ann Arbor
Gates, Neil A., Jr.....Ann Arbor
Goldman, Abe A.....(M) Ann Arbor
Gordon, Devitt L.....(M) Ann Arbor

Gotz, Alexander.....(M) Ann Arbor
Grawn, Frank A.....Ypsilanti
Greenway, Guerdon D.....Ypsilanti
Griep, Arthur H.....(M) Ann Arbor
Gulick, Arthur E.....(M) Ann Arbor
Gustafson, Jack R.....(M) Pittsfield Village
Haas, Reynold L.....Ann Arbor
Hagerman, George W.....Ann Arbor
Haight, Cameron.....Ann Arbor
Hall, Winston C.....(M) Ann Arbor
Hammond, W. W.....Plymouth
Handorf, Heinrich Hugo.....Northville
Hannum, M. R.....Milan
Harris, Bradley M.....Ypsilanti
Harris, Scott T.....Ypsilanti
Hastings, Warren C.....Ann Arbor
Henderson, John W.....Ann Arbor
Henry, L. Dell.....Ann Arbor
Himler, Leonard E.....Ann Arbor
Hinerman, Dorin L.....Ann Arbor
Hodges, Fred J.....Ann Arbor
Holt, John F.....Ann Arbor
Hoobler, Sibley W.....Ann Arbor
House, Frederic B.....Ann Arbor
Howard, S. C.....Ann Arbor
Hunsberger, Walter G.....(M) Ann Arbor
Hunt, Robert E.....Ann Arbor
Ideson, Robert S.....Ann Arbor
Jackson, Raymond S.....(M) Ann Arbor
Jimenez, Buenaventura.....Ann Arbor
Johnston, Franklin D.....Ann Arbor
Jones, A. Curtis, Jr.....(M) Ann Arbor
Juracek, Valeria R.....Ann Arbor
Kahn, Edgar A.....Ann Arbor
Kambly, Arnold H.....(M) Ann Arbor
Keefe, Eugene J.....(M) Ann Arbor
Keene, Clifford H.....Ann Arbor
Kemper, J. W.....Ann Arbor
Kert, Morley J.....Los Angeles, Calif.
Killins, Charles G.....Grosse Pointe
King, Walter G.....(M) Ann Arbor
Knoll, Leo A.....Ann Arbor
La Fever, Sidney L.....Ann Arbor
Lampe, Isadore.....Ann Arbor
Law, John L.....(M) Ann Arbor
Levin, Manuel.....Ann Arbor
Lichty, Dorman E.....Ann Arbor
Locklin, W. Kaye.....(M) Ann Arbor
Lowell, Vivion F.....Ypsilanti
Lusk, Harry A.....(M) Ypsilanti
MacIntyre, Robert S.....Ann Arbor
Mahon, Ralph D.....(M) Ann Arbor
Malcolm, Karl D.....Ann Arbor
Marshall, Mark.....Ann Arbor
Martin, Donald W.....Ypsilanti
Mason, James T.....(M) Ann Arbor
Maxwell, James H.....Ann Arbor
McCotter, Rollo E.....Ann Arbor
McEachern, Thomas H.....Ann Arbor
McNicholas, John R.....(M) Ann Arbor
Mehl, Omar C.....Ann Arbor
Mevers, Muriel C.....Ann Arbor
Milford, Albert F.....Ypsilanti
Miller, Harold.....Saline
Miller, Norman F.....Ann Arbor
Muehlig, George F.....Ann Arbor
Musselman, M. M.....(M) Pittsfield Village
Myers, Dean W.....Ann Arbor
Nesbir, Reed M.....Ann Arbor
Newton, Charles W., Jr.....Ann Arbor
Nickel, Kenneth C.....Ypsilanti
O'Connor, Sylvester J.....(M) Ann Arbor
Oliphant, L. W.....Ann Arbor
Parnall, Christopher G.....Ann Arbor
Patterson, Ralph M.....Ann Arbor

Payne, Beverly C.....(M) Ann Arbor
Peet, Max.....Ann Arbor
Pollard, H. M.....Ann Arbor
Pommerening, Robert A.....Ann Arbor
Potter, Marcia.....Ypsilanti
Poznak, Leonard A.....Ann Arbor
Price, Helen F.....Ann Arbor
Prout, Gordon J.....Saline
Quilligan, J. J.....Ann Arbor
Ransom, Henry.....Ann Arbor
Raphael, Theophile.....Ann Arbor
Ratloff, Rigdon K.....Ann Arbor
Reiff, William H.....(M) Ann Arbor
Riecker, H. H.....Ann Arbor
Riggs, Harold W.....Ann Arbor
Robinson, William D.....Ann Arbor
Ross, C. Howard.....Ann Arbor
Sayre, George S.....Ypsilanti
Schoch, Henry K., Jr.....(M) Ann Arbor
Schumacker, W. E.....Ann Arbor
Scovill, H. A.....Ypsilanti
Seevers, Maurice H.....Ann Arbor
Seime, Reuben I.....Ypsilanti
Shapiro, Hyman D.....(M) Ann Arbor
Sheldon, John M.....Ann Arbor
Sibbald, Malcolm L.....Chelsea
Sink, Emory W.....Ann Arbor
Slenger, Walworth R.....Ann Arbor
Smalley, Marianna.....Ann Arbor
Smith, Eleanor.....Ann Arbor
Snow, Glenadine.....Ypsilanti
Spears, Clarence W.....Ypsilanti
Stewart, Wayne H.....(M) Ann Arbor
Strayer, John W.....(M) Ann Arbor
Struthers, J. N. P.....Ann Arbor
Sturgis, Cyrus C.....Ann Arbor
Sundwall, John.....Ann Arbor
Swank, Helen S.....Ann Arbor
Sweet, Robert B.....(M) Ann Arbor
Taylor, George D.....(M) Ann Arbor
Teed, Reed Wallace.....Ann Arbor
Thieme, E. Thurston.....Ann Arbor
Thompson, James B.....Ann Arbor
Thomson, Daniel C.....(M) Ann Arbor
Tomsett, Arthur C., Jr.....(M) Ann Arbor
Towsley, Harry A.....Ann Arbor
Ulmer, Arthur H.....(M) East Ann Arbor
Waggoner, R. W.....Ann Arbor
Waldron, Alexander M.....Ann Arbor
Washburne, Charles L.....Ann Arbor
Watson, Ernest Hamilton.....Ann Arbor
Weeks, William F.....(M) Ann Arbor
Weller, Keith E.....(M) Ann Arbor
Werthenberger, M. D.....Ann Arbor
Wessinger, J. A.....(E) Ann Arbor
Westerberg, Martha R.....Ann Arbor
Westover, Charles J.....Plymouth
Wiesinger, Warren E.....(M) Ann Arbor
Wile, Udo J.....Ann Arbor
Wilkinson, Chas. F.....Ann Arbor
William Howard R.....Ann Arbor
Williamson, F. B.....Ypsilanti
Wilson, Frank N.....Ann Arbor
Wilson, James LeRoy.....Ann Arbor
Wisdom, Inez.....Ann Arbor
Wollum, Arnold.....(M) Ann Arbor
Woods, J. J.....Ypsilanti
Worth, Melissa H.....Ypsilanti
Wright, Edwin M.....(M) Ann Arbor
Wright, Walter J.....Ypsilanti
Wylie, Wm. C.....Dexter
Yared, Jerome A.....(M) Ann Arbor
Yoder, O. R.....Ypsilanti
Zatzkin, Herbert R.....(M) Ann Arbor
Zerbi, Victor M.....Willow Run Village

Wayne County

Aaron, Charles D.....(E) Detroit
Abbott, H. L.....Detroit
Abbott, William E.....Detroit
Abruzzo, Anthony M.....Eloise
Adamian, Gerald.....Detroit
Adams, James Robert.....Dearborn
Adelson, Sidney L.....Detroit

Adler, Sidney.....Detroit
Agnew, George H.....Detroit
Akroyd, Cecil.....Detroit
Albrecht, Herman F.....Detroit
Alderman, R. F.....Detroit
Aldrich, E. Gordon.....Detroit
Aldrich, Napier S.....Detroit

Alexander, Eugene James.....Detroit
Alford, E. S.....Belleville
Allen, John V.....Lincoln Park
Alles, Russell W.....Detroit
Allison, Frank B.....Detroit
Allison, Herbert C.....Grosse Pointe Farms
Alper, Louis.....Detroit

ROSTER 1948

Alpiner, Sam.....Detroit
Altman, Raphael.....Detroit
Altshuler, Abraham M.....Detroit
Altshuler, Ira M.....Detroit
Altshuler, Samuel.....(M) Battle Creek
Amolsch, Arthur L.....Detroit
Amos, Thomas G.....Detroit
Anderson, Bruce.....(L) Detroit
Anderson, Charles P.....Eloise
Anderson, Gordon H.....Dearborn
Anderson, J. O.....Detroit
Anderson, Raymond T.....Detroit
Anderson, Walter L.....Detroit
Anderson, Walter T.....Detroit
Anderson, William H.....(M) Ewen
Andries, George H., Jr.....Detroit
Andries, Joseph H.....(E) Detroit
Andries, Raymond C.....Detroit
Ankley, J. W.....Detroit
Annessa, Domenico M.....Detroit
Anslow, Robert E.....Detroit
Appel, Phillip R.....Detroit
Appelman, H. B.....Detroit
Archambault, Henry.....Detroit
Arehart, Burke W.....Detroit
Arent, John G.....Detroit
Armstrong, Arthur G.....Detroit
Arnold, Effie.....Detroit
Aronstam, Noah E.....(L) Detroit
Arrington, Robyn J.....Detroit
Ascher, Meyer S.....Detroit
Ashe, Stilson R.....Detroit
Ashley, L. Byron.....Detroit
Ashton, F. B.....(L) Highland Park
Aselin, Regis F.....Detroit
Atchison, Russell M.....Northville
Athay, Roland M.....Eloise
Atler, Lawrence R.....Detroit
Atler, Leroy L.....Detroit
Auble, Max E.....Detroit
August, Harry E.....Detroit
Auld, Douglas V.....Detroit
Awrin, Ira.....Detroit
Axelson, A. U.....Detroit

Babcock, Kenneth B.....Detroit
Babcock, L. K.....Detroit
Babcock, Myra E.....Detroit
Babcock, W. W.....Detroit
Bach, Walter F.....Detroit
Bachman, Morris E.....Detroit
Bacon, Vinton A.....Detroit
Bader, Benjamin H.....Detroit
Baer, George J.....Detroit
Baer, Raymond B.....Detroit
Baef, Michael A.....Detroit
Bagley, Harry E.....Dearborn
Bailey, Carl C.....Detroit
Bailey, Don A.....Detroit
Bailey, John H.....Detroit
Bailey, Louis J.....Detroit
Baker, Clarence.....Detroit
Baker, Howard A.....Detroit
Bakst, Joseph.....Detroit
Balaga, F. T.....Detroit
Balberor, Harry.....Detroit
Balcerski, Matthew A.....Detroit
Ballard, Charles S.....Detroit
Balsar, Charles W.....Detroit
Baltz, James I.....Detroit
Baranowski, A. W.....Detroit
Barland, Oscar L.....Detroit
Barnes, Donald I.....Detroit
Barnett, Edwin D.....Detroit
Barnett, Morton.....Detroit
Barnett, Saul E.....Detroit
Barone, Charles J.....Highland Park
Barrett, Clarence D.....Dearborn
Barrett, Wyman D.....Detroit
Barron, William H.....Detroit
Bartemeier, Leo H.....Detroit
Barton, J. R.....Detroit
Bates, Gaylord S.....Dearborn
Bauer, Benedict J.....Detroit
Bauer, A. Robert.....Detroit
Bauer, Lester Eugene.....Detroit
Baumer, Moe.....Detroit
Baumgarten, Elden C.....Detroit
Bayles, John G.....Detroit
Beach, Watson.....Detroit
Beam, A. Duane.....Grosse Pointe
Beamer, George D.....Dearborn
Beaton, Colin.....Detroit
Beattie, Robert.....(L) Detroit
Beaver, Donald C.....Detroit
Beck, Eva F.....Eloise
Becker, Abraham.....Detroit
Becker, Joseph Wm.....Detroit
Becklein, C. L.....Detroit
Beckwith, Carl C.....Detroit
Beckwith, M. C.....Detroit
Bedell, A.....Detroit
Beeuwkes, L. E.....Dearborn
Behn, Claud W.....Detroit
Beigler, Sydney K.....Detroit

Beitman, Max R.....Detroit
Belanger, Henri.....(E) River Rouge
Belanger, Wm. George.....Detroit
Belisle, John A.....Eloise
Bell, J. Kenner.....Detroit
Bell, William.....Detroit
Benjamin, Wm. O.....Detroit
Bennett, Germany E.....Detroit
Bennett, Harry B.....Detroit
Bennett, Sanford A.....Detroit
Bennett, Zina B.....Detroit
Benson, C. D.....Detroit
Benson, Davis A.....Detroit
Benson, Virginia.....Detroit
Bentley, Frederick E.....Plymouth
Bentley, Neil I.....Detroit
Berent, Morris S.....Detroit
Berge, Clarence A.....Detroit
Bergman, Murray S.....Detroit
Bergo, Howard L.....Detroit
Berke, Sydney S.....Detroit
Berkey, Wm. E.....Detroit
Berkman, Ruth.....Detroit
Berlien, Ivan C.....Detroit
Berman, Lawrence.....Detroit
Berman, Robert.....Detroit
Berman, Sidney.....Detroit
Bermucci, Robert J.....Detroit
Bernard, Walter G.....Detroit
Bernbaum, Bernard.....Detroit
Bernstein, Albert E.....Detroit
Bernstein, Samuel S.....Detroit
Berry, Joseph E.....Detroit
Besancon, J. H.....Detroit
Best, T. H. Edward.....Detroit
Bicknell, Edgar A.....Detroit
Bicknell, Frank B.....Detroit
Birch, John R.....Detroit
Birmingham, John R.....Detroit
Birkelo, Carl C.....Detroit
Birndorf, Leonard.....Detroit
Bittker, I. Irving.....Detroit
Black, Perry S.....Detroit
Blaha, Vernon B.....Detroit
Blain, Alexander W.....Detroit
Blain, Alexander III.....Detroit
Blain, James H., Jr.....Detroit
Blaine, Max.....Detroit
Blair, K. E.....Detroit
Blanchet, Alred D.....Detroit
Blashill, James B.....Detroit
Bleier, Alfred.....Detroit
Bleier, Joseph.....Detroit
Bloch, Abraham.....Detroit
Blodgett, Wm. E.....(L) Detroit
Blodgett, William H.....Detroit
Bloom, Arthur R.....Detroit
Blumenthal, Franz L.....Detroit
Boccaccio, John.....Detroit
Boccia, James J.....Detroit
Boddie, Arthur W.....Detroit
Boddie, Lewis F.....Detroit
Boell, Arthur F.....Detroit
Bogue, Robert E.....Detroit
Bogusz, Ladislau.....Eloise
Bohn, T. Stephen.....Detroit
Boileau, T. I.....Detroit
Bolstad, Donald S.....Detroit
Bookmyer, R. H.....Detroit
Bookstein, Abraham M.....Detroit
Bornstein, Sidney.....Detroit
Bott, Edmund T.....Wyandotte
Botvinick, Isadore.....Detroit
Boutros, Thomas A.....Detroit
Bövil, E. G.....Detroit
Bower, Franklin T.....Detroit
Bowers, Leo J.....Detroit
Brachman, D. S.....Detroit
Bracken, Andrew H.....Dearborn
Bradley, George.....Detroit
Bradshaw, Wm. H.....Detroit
Brady, Herbert A.....River Rouge
Braitman, Louis.....Detroit
Braley, W. N.....Detroit
Bramigk, Fritz W.....Detroit
Brando, Russell G.....Detroit
Brandt, Edward L.....Detroit
Braun, Lionel.....Detroit
Braverman, Morris.....Detroit
Breitenbecher, Edw. R.....Detroit
Brekke, Viola G.....Detroit
Bremer, Wm. M.....Detroit
Brenge, Deane R.....Detroit
Breon, Guy L.....Detroit
Briegel, Walter A.....Detroit
Brines, O. A.....Detroit
Bringard, Elmer L.....Detroit
Brisbois, Harold J.....Plymouth
Brisson, Joseph.....Detroit
Broadman, Sylvan.....Detroit
Bromme, William.....Detroit
Bronson, Wm. W.....Detroit
Brooks, A. L.....Flint
Brooks, Clark D.....Detroit

Brooks, Charles W.....Detroit
Brooks, Nathan.....Detroit
Brosius, Wm. L.....Detroit
Brough, Glen A.....Detroit
Brown, A. O.....Detroit
Brown, Carlton F.....Detroit
Brown, Charles H.....Detroit
Brown, Francis.....Detroit
Brown, Gordon T.....Detroit
Brown, Harvey F.....Detroit
Brown, Henry S.....Detroit
Brown, John R.....Detroit
Brown, Robert A.....Detroit
Brown, Samuel.....Detroit
Brown, Stanley H.....Detroit
Brown, Thomas A.....Detroit
Brownell, Paul G.....Detroit
Bruehl, Richard.....Detroit
Bruer, Edgar S.....Ecorse
Bruer, Edwin L.....Detroit
Brunk, Andrew S.....Detroit
Brunk, C. F.....Detroit
Brunke, B. B.....Detroit
Brush, Brock Edwin.....Detroit
Bryce, John D.....Detroit
Buchanan, W. Paul.....Detroit
Buck, John D.....Detroit
Budson, Daniel.....Detroit
Buesser, Frederick G.....Detroit
Buller, H. L.....Detroit
Burgess, Charles M.....Detroit
Burnstine, Julius Y.....Detroit
Burnstine, Perry P.....Detroit
Burr, George C.....Detroit
Burr, H. Leonard.....Detroit
Burroughs, R. G.....Detroit
Burrows, Howard A.....Dearborn
Burstein, Harry S.....Detroit
Burstein, I. Marvin.....Detroit
Burstein, Morris M.....Detroit
Burton, D. T.....Detroit
Burton, I. F.....Detroit
Bush, Glendon J.....Detroit
Bush, Lowell M.....Detroit
Butler, Harry J.....(L) Highland Park
Butler, J. Payne.....Detroit
Butler, L. H.....Detroit
Butler, Volney N.....Detroit
Butterworth, Herman K.....Lincoln Park
Buttrum, Edward J.....Detroit
Byers, Dudley W.....Detroit
Byington, Garner M.....Detroit

Cadieux, Henry W.....(L) Detroit
Cahalan, Joseph L.....Detroit
Caldwell, J. Ewart.....Detroit
Caldwell, George L.....Detroit
Calkins, H. N.....Detroit
Callaghan, T. T.....Detroit
Cameron, A. H.....Wyandotte
Cameron, Duncan A.....Detroit
Campau, George H.....Detroit
Campbell, Charles A.....Dearborn
Campbell, Darrell A.....Eloise
Campbell, Duncan.....Detroit
Campbell, Duncan A.....(L) Detroit
Campbell, Malcolm D.....Detroit
Campbell, Mary B.....Detroit
Candler, Clarence L.....Detroit
Canter, Allie L.....Detroit
Canter, G. E.....Detroit
Cantor, M. O.....Detroit
Capano, Oreste, A.....Pontiac
Capellari, Elmer E.....Detroit
Caputo, Joseph M.....Dearborn
Caraway, James E.....Wayne
Carbone, Louis A.....Detroit
Carey, Cornelius.....Detroit
Carleton, Lawrence H.....Detroit
Carlson, Harold W.....Detroit
Carmichael, E. K.....Detroit
Carnes, Harry E.....Detroit
Carp, Joseph.....Detroit
Carpenter, C. H.....Detroit
Carpenter, C. J.....Detroit
Carpenter, Glenn B.....Detroit
Carpenter, William S.....Detroit
Carr, J. G.....Detroit
Carroll, E. H.....Detroit
Carroll, Lona B.....Detroit
Carrick, Lee.....Detroit
Carson, Herman J.....Detroit
Carstens, Henry R.....Philadelphia, Pa.
Carter, John M.....Detroit
Carter, L. F.....Detroit
Cassidy, Wm. J.....Detroit
Castrop, C. W.....Dearborn
Catherwood, A. E.....Detroit
Caton, Dorothy.....Detroit
Caughy, E. H.....Detroit
Caumartin, Fred E.....Detroit
Cavell, Roscoe W.....Detroit
Ceresko, A. R.....Detroit

ROSTER 1948

Chalat, Jacob H.....Detroit
Chabut, V. George.....Northville
Chall, Henry G.....Detroit
Chapin, Sidney E.....Dearborn
Chapman, Aaron L.....Detroit
Chapman, Paul T.....Detroit
Chapnick, H. A.....Detroit
Charleston, R. A.....Detroit
Charnas, Sidney.....Detroit
Chase, Clyde H.....Detroit
Chatel, Arthur N.....Detroit
Chesluk, H. M.....Detroit
Chester, W. P.....Detroit
Childs, George M.....Detroit
Chipman, W. A.....Detroit
Chittenden, George E.....Detroit
Chostner, G. C.....Detroit
Christensen, C. A.....Dearborn
Christopher, James G.....Detroit
Chrouch, Laurence A.....Detroit
Church, Aloysius.....Detroit
Cioffari, Mario S.....Detroit
Ciprian, Joseph E.....Detroit
Clark, Benj. W.....(M) Detroit
Clark, Charles J.....Dearborn
Clark, C. M.....Detroit
Clark, Donald V.....Detroit
Clark, George E.....(E) Detroit
Clark, Harold E.....Detroit
Clark, Harry G.....Detroit
Clark, Harry L.....Detroit
Clark, Ronald E.....Detroit
Clarke, Norman E.....Detroit
Clifford, Charles H.....Detroit
Clifford, John E.....Detroit
Clifford, Thomas P.....Detroit
Clippert, J. C.....Grosse Ile
Coan, Glenn L.....Wyandotte
Coates, Carl Amos.....Dearborn
Cobane, John H.....Detroit
Cochrane, Edgar G.....Detroit
Cohen, H. Herbert.....Detroit
Cohn, Daniel E.....Detroit
Cohoe, Don A.....Detroit
Cole, Fred H.....Detroit
Cole, James E.....Detroit
Cole, Wyman C. C.....Detroit
Coleman, Margaret W.....Detroit
Coleman, William G.....Redford
Coll, Howard R.....Detroit
Collins, James D.....Detroit
Colvin, Leslie T.....Detroit
Colyer, Raymond G.....Detroit
Comfort, Milton D.....Flat Rock
Comstock, Lawrence.....Trenton
Condon, Stanley.....Detroit
Conley, L. C. M.....Detroit
Conn, Harold.....Detroit
Connelly, Richard C.....Detroit
Conner, Edward D.....Detroit
Connolly, Frank.....Detroit
Connolly, John P.....Detroit
Connolly, Paul J.....Detroit
Connors, J. J.....Detroit
Conrad, E. R.....Detroit
Constable, Canute G.....Detroit
Cook, James C.....Detroit
Cooksey, Warren B.....Detroit
Coolidge, Maria Belle (L).....Grosse Pt. Pk.
Cooper, B. J.....Detroit
Cooper, E. L.....Detroit
Cooper, James B.....Detroit
Cooper, Ralph R.....Detroit
Corbeille, Catherine.....Detroit
Cosaglia, Robert P.....Detroit
Cosgrove, Wm. J.....Detroit
Costello, Russell T.....Detroit
Cotruro, L.D.....Detroit
Cotton, S. O.....Detroit
Coulter, Wm. J.....Detroit
Courville, Charles J.....Detroit
Cowan, Wilfrid.....Detroit
Cowen, Leon B.....Detroit
Cowen, Robert L.....Detroit
Coyne, Douglas R.....Detroit
Crane, Lagdon T.....Detroit
Crane, Thomas P.....Dearborn
Cree, Walter J.....(E) Detroit
Crews, Thomas H.....Detroit
Croll, L. J.....Detroit
Croll, Maurice.....Detroit
Crook, Charles L.....Highland Park
Cross, Harold E.....Detroit
Crosen, Henry F.....Detroit
Croushore, J. E.....Detroit
Cruikshank, Alexander.....(E) Detroit
Culp, Ormond.....Detroit
Curhan, Joseph H.....Detroit
Curry, F. S.....Detroit
Curtis, Frank E.....Detroit
Curtiss, William P.....Detroit
Cushing, Russell G.....Detroit
Cushman, H. P.....Detroit
Cusick, Paul L.....Detroit

Dale, Esther H.....Detroit
Dale, Mark.....Detroit
Danforth, James C., Jr.....Grosse Pointe
Danforth, J. C.....Detroit
Danforth, Mortimer E.....Detroit
Daniels, L. E.....Detroit
Darling, Milton A.....Detroit
Darpin, Peter H.....Detroit
Dart, Edward E.....Detroit
Davidson, Harry O.....Detroit
Davies, Thomas S.....Grosse Pointe
Davies, Windsor S.....Detroit
Davis, Egbert F.....(L) Detroit
Davis, George H.....(M) Detroit
Dawson, F. E.....Detroit
Dawson, Ralph.....Detroit
Dawson, W. A.....Inkster
Day, A. Jackson.....Detroit
Day, J. Claude.....Detroit
Deering, Robert J.....River Rouge
Defever, Cyril R.....Detroit
Defnet, Wm. A.....Detroit
DeJongh, Edwin.....Detroit
Delaney, James.....Detroit
Demaray, John F.....Detroit
Dempster, James H.....(L) Detroit
De Nike, A. James.....Detroit
Denis, George M.....Detroit
Denison, Louis L.....Detroit
DePonio, Sylvester A.....Detroit
Derby, Arthur P.....Detroit
Deresz, Alphonse.....Detroit
Derleth, Paul E.....Detroit
De Spelder, Ray E.....Detroit
De Tomasi, Rome Q.....Detroit
Dibble, Harry F.....Detroit
Dickson, B. R.....Detroit
Dickson, Elias L.....Detroit
Diebel, Nelson W.....Detroit
Dietzel, H. O.....Detroit
Dill, Hugh L.....Detroit
Dill, J. Lewis.....Detroit
Di Loretto, Panfilo C.....Detroit
Dinnen, William.....Detroit
Dittmer, Edwin.....Detroit
Dixon, Fred W.....Dearborn
Dixon, Ray S.....Detroit
Dixon, Robert K.....Detroit
Dodds, John C.....Detroit
Dodenhoff, C. F.....Detroit
Dodrill, F. D.....Detroit
Doerr, Louis E., Jr.....Detroit
Dolega, Stanley F.....Detroit
Dolman, E. Nesbitt.....Detroit
Domzalski, C. A.....Detroit
Donald, Douglas.....Detroit
Donovan, Daniel R., Jr.....Detroit
Donovan, Richard S.....Detroit
Dorniak, Ben P.....Detroit
Dorsey, John M.....Highland Park
Doty, Chester A.....Detroit
Doub, Howard P.....Detroit
Douglas, Bruce H.....Detroit
Douglas, Clair L.....Detroit
Dovitz, Benjamin W.....Detroit
Dow, Roy E.....Detroit
Dowdle, Edward.....Detroit
Downer, Ira G.....Detroit
Doyle, George H.....Detroit
Drake, Ellet H.....Detroit
Drake, James J.....Detroit
Draves, Edward F.....Detroit
Drews, Robert S.....Detroit
Drinkhaus, Harold I.....Detroit
Droock, Victor.....Detroit
Dubin, Joseph J.....Detroit
Dubnove, Aaron.....Detroit
Du Bois, Paul W.....Detroit
Dubpernell, Karl.....(E) Detroit
Dubpernell, Martin S.....Detroit
Dudek, John J.....Detroit
Dundas, Edw. M.....Detroit
Dunlap, Henry A.....Detroit
Dunlap, Samson F.....Detroit
Dunn, Cornelius E.....Detroit
Durocher, Edmund J.....Ecorse
Dwaihy, Paul.....Detroit
Dwyer, Francis.....Detroit
Dziuba, John F.....Detroit

Elliott, Wm. G.....Detroit
Elman, Meyer J.....Detroit
Elvidge, Robert J.....Detroit
Emmert, Herman C.....(L) Detroit
Engel, Earl H.....Wyandotte
English, Leo V.....Detroit
Eno, Laurel S.....Detroit
Ensign, Dwight C.....Detroit
Ensing, Osborn.....Detroit
Epstein, S. G.....Detroit
Erickson, Eldon W.....Detroit
Erickson, Milton H.....Eloise
Erkfitz, Arthur W.....Detroit
Eschbach, Joseph W.....Dearborn
Estabrook, Bert U.....Detroit
Ettinger, Clayton J.....Detroit
Evans, Joseph M.....Detroit
Evans, Leland S.....Detroit
Evans, William A., Jr.....Detroit
Evison, Emerson.....Detroit
Ewing, C. H.....Detroit
Eyres, Albert E.....Grosse Pointe
Fagin, Irvin D.....Detroit
Falick, M. L.....Detroit
Falk, Ira E.....Detroit
Fallis, Lawrence S.....Detroit
Fandrich, Theodore.....Detroit
Farbman, Aaron A.....Detroit
Fauman, David H.....Detroit
Faunce, Sherman P.....Detroit
Felcyn, W. George.....Detroit
Feld, David.....Detroit
Feldkamp, Lee E.....Detroit
Feldman, Paul.....Detroit
Feldstein, Martin Z.....Detroit
Fellers, Ray L.....Detroit
Fenech, Harold B.....Detroit
Fenner, Wm. G.....Detroit
Fenton, E. H.....Detroit
Fenton, Meryl M.....Detroit
Fenton, Russell F.....Detroit
Fenton, Stanley C.....Detroit
Ferrara, Virginia M.....Detroit
Ferrera, Louis V.....Detroit
Fettig, Carl A.....(L) Detroit
Finch, Alvis D.....Detroit
Finch, F. Sinclair.....Detroit
Fine, Edward.....Detroit
Finkelstein, M. B.....Detroit
Fischer, Frederick J.....Detroit
Fisher, George S.....Detroit
Fisher, O. O.....Detroit
Fisher, R. L.....Detroit
Fitzgerald, James M.....Detroit
Flaherty, H. J.....Detroit
Flaherty, Norman W.....Dearborn
Fleming, L. N.....Detroit
Flora, Wm. R.....Detroit
Flower, J. A.....Detroit
Fogt, Herbert E.....Detroit
Fogt, Robert G.....Detroit
Foley, Hugh S.....Dearborn
Foley, Joseph M.....Detroit
Font, Anthony J.....Detroit
Foote, James A.....Lincoln Park
Ford, George A.....Detroit
Ford, Sylvester.....Detroit
Ford, Walter D.....Detroit
Fordell, F. S.....Detroit
Forrester, Alex V.....Detroit
Forsythe, John R.....Detroit
Foster, E. Bruce.....Detroit
Foster, Daniel P.....Detroit
Foster, Linus J.....Detroit
Foster, Owen C.....Detroit
Foster, Wm. L.....Detroit
Foster, W. M.....Detroit
Fowler, Melvin E.....Detroit
Fox, Morris E.....Dearborn
Fraiberg, Paul L.....Detroit
Franjac, M. J.....Dearborn
Franklin, John.....Detroit
Franzen, Nils A.....Detroit
Fraser, Eldred E.....Detroit
Frazer, Mary Margert.....Detroit
Free, Harry W.....Detroit
Freedman, John.....Detroit
Freedman, Milton.....Detroit
Freeman, B. F.....Detroit
Freeman, D. K.....Detroit
Freeman, Mabel.....Detroit
Freeman, Michael.....Detroit
Freeman, Thelma.....Detroit
Freeman, Wilmer.....Detroit
Freid, Samuel.....Detroit
Freier, Morton L.....Detroit
Fremont, Joseph C.....Detroit
Freund, Hugo A.....Detroit
Friedlaender, Alex S.....Detroit
Friedlaender, Sidney.....Detroit
Friedman, David.....Detroit
Friedman, I. H.....Detroit
Frothingham, George E.....(E) Detroit

ROSTER 1948

Fruend, Henrietta.....Detroit
Fryogle, James D.....Detroit
Fullenwider, Allan C.....Detroit
Fuller, Hugh M.....Detroit
Fulton, Wm. James.....Detroit

Gaba, Howard.....Detroit
Gabe, Sigmund.....Detroit
Gaberman, David B.....Detroit
Gaffney, J. Mitchell.....Detroit
Galantowicz, H. C.....Detroit
Galdonyi, Laslo L.....Detroit
Galdonyi, Nicholas.....Detroit
Galerneau, D. B.....Center Line
Gamble, Parker B.....Detroit
Gannan, Arthur M.....Detroit
Ganschow, John H.....Detroit
Gardner, Lawrence.....Detroit
Garipey, Louis J.....Detroit
Gaston, Herbert B.....Detroit
Gates, Nathaniel H.....Detroit
Gaynor, Alex.....Detroit
Gehring, Harold W.....Detroit
Geib, Ledru O.....Detroit
Geitz, Wm. A.....Detroit
Gelbach, Philip D.....Detroit
Gellert, I. S.....Detroit
Gemero, J. C.....Detroit
Gerondale, Edmond J.....Detroit
Giese, Fred W.....Detroit
Gigante, Nicola.....Detroit
Gilbert, Harold R.....Wyandotte
Gillespie, Stephen M.....Dearborn
Gillman, R. W.....(E) Detroit
Ginsberg, Harold I.....Detroit
Gitlin, Charles.....Detroit
Gitlin, Julius R.....Detroit
Gittins, Perry C.....Detroit
Glasgow, Gordon K.....Detroit
Glassman, Samuel.....Detroit
Glazer, Walter S.....Detroit
Glees, J. L.....Grosse Pointe Farms
Glemet, Raymond B.....Detroit
Glowacki, B. F.....Detroit
Gmeiner, Clarence C.....Detroit
Goerke, Elmer A.....Romulus
Goetz, Angus G.....Detroit
Goins, Wm. F.....Detroit
Goldberg, Arthur.....Detroit
Goldberg, Harry H.....Detroit
Goldberg, Nathan.....Detroit
Goldin, M. I.....Eloise
Goldman, Aubrey.....Detroit
Goldman, Perry.....Detroit
Goldsmith, Joseph D.....Detroit
Goldstone, R. R.....Detroit
Goldman, Maurice D.....Detroit
Gonne, Wm. S.....Detroit
Goodrich, B. E.....Detroit
Gordon, John W.....(R) Detroit
Gordon, William H.....Detroit
Gorelick, Martin J.....Dearborn
Gorning, Raymond P.....Detroit
Goryl, Stephen V.....Detroit
Gostine, Edmond.....Detroit
Gottschalk, Fred W.....Detroit
Gould, S. E.....Eloise
Gourley, E. V.....Detroit
Goux, R. S.....Detroit
Grace, J. M.....Detroit
Gradolph, Paul L.....(M) Detroit
Graft, J. M.....Detroit
Graham, Julius A.....Detroit
Grain, Gerald O.....Detroit
Grajewski, Leo E.....Detroit
Gramley, Wm.....Detroit
Granger, Francis L.....Detroit
Gratton, Henri L.....Detroit
Gravelle, Lawrence J.....Detroit
Gray, Jacques Pierce.....Detroit
Greek, Louis M.....Detroit
Green, Ellis R.....Detroit
Green, Lewis.....Detroit
Green, Louis M.....Detroit
Green, Nelson W.....Detroit
Green, Simpson W.....Detroit
Greenberg, Jack R.....Detroit
Greenberg, Julius J.....Detroit
Greenberg, Morris Z.....Detroit
Greene, John B.....Detroit
Greenidge, Robert.....Detroit
Greenlee, Wm. Tate.....Detroit
Greiner, Bert A.....Detroit
Grekin, John N.....Detroit
Grekin, Samuel L.....Detroit
Griffith, Arthur J.....Detroit
Griffiths, Sidney.....Detroit
Grillo, S. Phillip.....Belleville
Grimaldi, G. J.....Detroit
Grinstein, Alexander.....Detroit
Grob, Otto.....Detroit
Grossman, Sol.....Detroit
Gruber, T. K.....Eloise
Guerrero, Jose.....Detroit
Guimaraes, A. S.....Dearborn

Gullickson, Miles J.....Eloise
Gurdjian, E. S.....Detroit
Gurskis, Eugenia.....Detroit
Gutow, Benjamin R.....Detroit
Guterman, Meyer A.....Detroit

Haefele, Leslie P.....Garden City
Haig, D. B.....Detroit
Haking, Leonard.....Detroit
Hale, Arthur S.....Detroit
Hall, E. Walter.....Detroit
Hall, James A. J.....Detroit
Hall, Ralph E.....Detroit
Hall, Robert J.....Detroit
Hallen, Leonard.....Detroit
Haluska, Joseph A.....Detroit
H'Amada, Norman K.....Detroit
Hamilton, Norman C.....Detroit
Hamilton, William.....Detroit
Hamilton, Wm. F.....(L) Detroit
Hammer, Edwin J.....Detroit
Hammer, Howard J. San Francisco, Cal.
Hammond, A. E.....Detroit
Hammond, James L.....Inkster
Hand, Fordus V.....Detroit
Hanna, Carl.....Detroit
Hanna, E. Howard.....Detroit
Hansen, Frederick E.....Detroit
Hanser, Joshua.....(L) Detroit
Hanson, Frederick N.....Wayne
Hanson, Joseph.....Detroit
Hardstaff, R. John.....Detroit
Hardy, George C.....Detroit
Hareluk, E. W.....Detroit
Harkaway, Roman.....Detroit
Harley, Garth H.....Detroit
Harley, Louis M.....Detroit
Harm, W. B.....Detroit
Harper, Jesse T.....Detroit
Harrell, Voss.....Reno, Nev.
Harris, Harold H.....Detroit
Harris, Ivor D.....Detroit
Harrison, Hugh.....(E) Detroit
Harrison, Wesley, Jr.....Detroit
Hart, Charles E.....Detroit
Hart, J. Clarence.....Detroit
Hartkop, Henry H.....Detroit
Hartman, Frank W.....Detroit
Hartmann, W. B.....Detroit
Hartzell, John B.....Detroit
Hasley, Clyde K.....Detroit
Hasley, Daniel E.....Detroit
Hassig, Walter W.....Detroit
Hastings, Orville J.....Detroit
Hause, Glen E.....Detroit
Hauser, I. Jerome.....Detroit
Hauser, John E.....Detroit
Hauser, Maurice.....Detroit
Havers, Howard.....Detroit
Hawkins, James W.....Detroit
Hayes, Joseph D.....Detroit
Heath, Leonard P.....Detroit
Heavner, L. E.....Detroit
Hecht, Manes.....Detroit
Hedges, Frank W.....Detroit
Hedrick, Donald W.....Detroit
Heenan, T. H.....Detroit
Heideman, Louis.....Detroit
Heldt, Thomas J.....Detroit
Hendelman, Manuel H.....Detroit
Henderson, A. B.....Detroit
Henderson, Allison B.....Detroit
Henderson, Harold.....Detroit
Henderson, James L.....Detroit
Henderson, Leslie T.....Detroit
Henderson, Wm. E.....Detroit
Hendricks, Frank R.....Detroit
Henig, Fred.....Detroit
Henrich, L. E.....Detroit
Herkimer, Dan R.....Lincoln Park
Herrold, Rose E.....Detroit
Herschelmann, Roy F.....Detroit
Hewitt, Leland V.....Detroit
Hewitt, Robert S.....Dearborn
Heyner, Stanley A.....Detroit
Hickey, Joseph.....Detroit
Hicks, Fred G.....Dearborn
Hiebert, J. M.....Detroit
Higbee, Arthur L.....Detroit
Hileman, Lee.....Ecorse
Hillenbrand, Alfred E.....Grosse Pointe
Hiller, Glenn I.....Detroit
Hilton, Wm. E.....Detroit
Hinko, Edward N.....Eloise
Hirschfield, Alexander H.....Detroit
Hirschman, L. J.....Detroit
Hochman, Morton M.....Detroit
Hodgkinson, C. P.....Detroit
Hodges, Roy W.....Detroit
Hodoski, Frank J.....Detroit
Hoenig, Andrew L.....Mancelona
Hoffman, E. S.....Detroit
Hoffman, Edward A.....Detroit
Hoffman, Harry Y.....Detroit
Hoffman, Henry A.....Detroit

Hoffman, Martin H.....Detroit
Holcomb, August A.....Northville
Holecomb, Clayton E.....Detroit
Hollander, A. J.....Detroit
Hollis, Henry B.....Detroit
Holman, Herbert H.....Detroit
Holmes, Alfred W.....Detroit
Holt, Henry T.....Detroit
Honhart, Fred L.....Detroit
Honor, Wm. H.....Wyandotte
Hookey, John A.....Detroit
Hooper, Norman L.....Detroit
Hoops, George B.....Detroit
Hopkins, J. E.....Detroit
Horan, Thomas.....Detroit
Horny, Hugo.....Grosse Pointe
Horton, Reece H.....Detroit
Horvath, Louis O.....Detroit
Horvitz, John B.....Detroit
Hotchkiss, Loris M.....Farmington
Howard, Austin Z.....Detroit
Howard, Phillip J.....Detroit
Howard, W. Leonard.....Northville
Howell, Bert F.....Detroit
Howes, Homer Allen.....Detroit
Howes, Willard Boyden.....Detroit
Howlett, Howard T.....Detroit
Hromadko, Louis.....Detroit
Hubbard, John P.....Detroit
Hubbard, Ralph G.....Detroit
Hudson, J. Stewart.....Grosse Pointe
Hudson, Wm. A.....Detroit
Huegli, Wilfred A.....Detroit
Huff, Reginald G.....Wayne
Hughes, Alberti A.....(L) Detroit
Hull, L. W.....Detroit
Hunt, T. H.....Detroit
Hunt, Verne G.....Detroit
Hunter, Basil H.....Detroit
Hunter, Elmer N.....Detroit
Husband, Charles W.....Detroit
Hussey, Raymond.....Detroit
Hyatt, Jarvis M.....Dearborn
Hyde, Frederick W.....Detroit
Hyde, Frederick W., Jr.....Detroit
Hyman, S. J.....Inkster

Iacobell, Peter H.....Detroit
Igna, Eli J.....Detroit
Ignatius, A. A.....Detroit
Insley, Stanley W.....Detroit
Irvine, Earle Albert.....Detroit
Irwin, W. A.....Detroit
Isaacson, Arthur.....Detroit
Israel, J. G.....Detroit
Iwata, Herbert.....Detroit

Jackson, George F.....Detroit
Jacobson, Samuel D.....Detroit
Jacoby, Myron D.....Detroit
Jaeger, Julius P.....(L) Detroit
Jaekel, C. N.....Detroit
Jaffar, Donald J.....Detroit
Jaffe, J. L.....Detroit
Jaffe, Jacob.....Detroit
Jaffe, Louis.....Detroit
Jahsman, William E.....Detroit
James, Richard G.....Detroit
Jamieson, Thomas J.....Lincoln Park
Janicki, Natalia J.....Eloise
Jarre, Hans A.....Detroit
Jarvis, Harold.....Detroit
Jarzebowski, F. B.....Detroit
Jarsen, Frank J.....Dearborn
Jasion, Lawrence J.....Detroit
Jend, Wm.....(L) Detroit
Jenkins, E. A.....Detroit
Jennings, Charles G.....Detroit
Jentgen, Charles J.....Detroit
Jentgen, L. G.....Detroit
Jeremias, Robert C.....Detroit
Jewell, F. C.....Detroit
Jocz, M. W.....Grosse Pointe Park
Jodar, E. O.....Detroit
John, Hubert R.....Detroit
Johnson, Homer L.....Detroit
Johnson, Ralph A.....Detroit
Johnson, Thomas.....Detroit
Johnson, Vernon P.....Detroit
Johnson, Vincent C.....Detroit
Johnson, W. H. M.....Detroit
Johnston, Charles G.....Detroit
Johnston, Everett V.....Detroit
Johnston, J. A.....Detroit
Johnston, John L.....Detroit
Johnston, Wm. E.....Detroit
Johnstone, Benjamin I.....Detroit
Joinville, E. V.....Detroit
Jones, Adrian R.....Detroit
Jones, Edna M.....Northville
Jones, L. Faunt.....Detroit
Jones, Roy D.....Detroit
Jordan, R. Gerald.....Detroit
Joyce, Stanley J.....Detroit

ROSTER 1948

Juliar, Benjamin.....Detroit
Jurov, Harry N.....Detroit
Kalayjian, Bernard S.....Detroit
Kalder, Ned Block.....Detroit
Kallet, Herbert I.....Detroit
Kallman, David.....Detroit
Kallman, Leo.....Detroit
Kallman, R. Robert.....Detroit
Kamin, Louis E.....Detroit
Kaminski, Zeno L.....Detroit
Kamperman, George A.....Detroit
Kanter, Herman.....Detroit
Kapetansky, A. J.....Detroit
Kapetansky, Nathan J.....Detroit
Kapita, Walter A.....Detroit
Karr, Herbert S.....Detroit
Kasabach, Harry Y.....Detroit
Kasabach, V. Y.....Detroit
Kasper, Joseph A.....Detroit
Kass, J. B.....Detroit
Katzman, I. S.....Detroit
Kaump, Donald H.....Detroit
Kauppinen, J. A.....Detroit
Kay, Edward W.....Hamtramck
Kazdan, Louis.....Detroit
Kazdan, Morris A.....Allen Park
Keane, Wm. E.....Allen Park
Keating, Thomas F.....Detroit
Kehoe, Henry J.....East Detroit
Keim, H. L.....Detroit
Keith, Kelly.....Detroit
Kelmenson, V. A.....Detroit
Kemler, Walter J.....Ecorse
Kemp, Hardy A.....Detroit
Kennary, James M.....Detroit
Kennedy, Charles S.....Detroit
Kennedy, Donald J.....Detroit
Kennedy, Lester F.....Detroit
Kennedy, Wm. Y.....Detroit
Kennedy, Robert B.....Detroit
Kenning, John C.....(A) Detroit
Kern, W. H.....Garden City
Kernkamp, Ralph.....Detroit
Kernick, M. O.....Detroit
Kersten, Armand G.....Detroit
Kersten, Werner.....Detroit
Kerzman, Joseph H.....Detroit
Keshishian, Sarkis K.....Detroit
Keyes, Eugene Charles.....Dearborn
Keyes, John W.....Detroit
Kibzey, Ambrose T.....Detroit
Kidner, Frederick C.....Detroit
Kimberlin, Kenneth K.....Detroit
King, Edward D.....Detroit
King, Melbourne J.....Detroit
Kingswood, Roy C.....Detroit
Kinsley, George.....Detroit
Kirchner, Augustus.....Detroit
Kirk, J. G.....Detroit
Kirschbaum, Harry M.....Detroit
Klebba, Paul.....Detroit
Klein, William.....Detroit
Kliger, David.....Detroit
Kline, Lewis Le Roy.....Detroit
Kline, Starr L.....Detroit
Klosowski, Joseph.....Detroit
Knaggs, Charles W.....(L) Grosse Pointe
Knaggs, Earl J.....Wyandotte
Knapp, Byron S.....River Rouge
Knapp, Floyd.....Detroit
Knobloch, Edmund J.....Detroit
Knoch, Hubert S.....Detroit
Knox, Ross M.....Ecorse
Koch, John C.....Detroit
Koebel, R. H.....Detroit
Koerber, Edward J.....Detroit
Koessler, George L.....Detroit
Kogut, C. S.....Detroit
Kohn, M. E.....Detroit
Kokowicz, Raymond J.....Detroit
Kopel, Joseph O.....Detroit
Korby, George J.....Detroit
Koren, Louis.....Eloise
Korum, Lyle W.....Detroit
Kossayda, Adam W.....Detroit
Koster, Koert.....Detroit
Kovach, Emery P.....Detroit
Kovan, D. D.....Detroit
Koven, Abraham.....Detroit
Kozlinski, Anthony E.....Detroit
Kozlow, Louise E.....Detroit
Kraft, Raymond B.....Detroit
Kraft, Ruth M.....Detroit
Krass, Edward W.....Detroit
Kraus, John J.....Detroit
Krebs, William T.....Detroit
Kreinbring, George E.....Detroit
Kretschmar, John C.....Detroit
Krieg, Earl G.....Detroit
Krieger, Harley L.....Detroit
Kritchman, M. J.....Detroit
Kroha, Lawrence.....Detroit
Krohn, Albert H.....Detroit
Krynicky, Francis X.....Detroit

Kubaneck, Joseph L.....Eloise
Kucmierz, Francis S.....Detroit
Kuhn, Albert A.....Detroit
Kuhn, Richard F.....Detroit
Kulaski, Chester H.....Detroit
Kullman, Harold J.....Dearborn
Kurcz, J. A.....Detroit
Kurtz, Harry C.....Detroit
Kurtz, I. J.....Detroit
Kwasiborski, S. A.....Wyandotte
LaBerge, James M.....Wyandotte
La Bine, Alfred C.....Detroit
La Core, Ivan.....Detroit
La Ferte, Alfred D.....Detroit
Lakoff, Charles.....Detroit
Lam, Conrad R.....Detroit
Lamberson, Frank A.....Detroit
La Marche, Norman O.....Detroit
Lammy, James V.....Detroit
Lampman, H. H.....Detroit
Landers, M. B., Sr.....Detroit
Landers, M. B., Jr.....Detroit
Lang, Ernst Frederick.....Detroit
Lang, Leonard W.....Detroit
Lange, Anthony H.....Detroit
Lange, Wm. A.....Detroit
Laning, George M.....Detroit
Lansky, Mandell.....Detroit
Lapham, Fred E.....Detroit
Large, A. M.....Detroit
Larsson, Bror H.....Detroit
Lasichak, Andrew G.....Eloise
Lasley, James W.....Detroit
Lathrop, Philip L.....Detroit
Latteier, K. K.....Detroit
Lauppe, Edward H.....Detroit
Lauppe, F. A.....Detroit
Laurisin, Eugene.....Detroit
Lazar, Morton R.....Detroit
Leach, David.....Detroit
Leacock, Robert C.....Detroit
Leader, L. R.....Detroit
Leaver, L. Ross.....Detroit
Leckie, George C.....Detroit
Ledwidge, Patrick L.....Detroit
Lee, Harry E.....Detroit
Le Gallee, George M.....Detroit
Leibinger, Henry R.....Detroit
Leipsitz, Louis S.....Detroit
Leiser, Rudolf.....Eloise
Leithausen, D. J.....Detroit
Leland, Sol.....Detroit
Lemley, Clark.....Detroit
Lemmon, Charles E.....Detroit
Lemmon, Clarence W.....River Rouge
Lentine, James J.....Detroit
Lenz, Willard R.....Grosse Pointe
Lepard, C. W.....Detroit
Lepley, Fred O.....Detroit
Lerman, S. E.....Centerline
Lescotier, Alex W.....Grosse Pointe
L'Esperance, Simon P.....Detroit
Leszynski, J. S.....Detroit
Leucutia, Traian.....Detroit
Levagood, Floyd.....Detroit
Levant, Arthur B.....Detroit
Levin, David M.....Detroit
Levin, Samuel J.....Detroit
Levine, Edward E.....Detroit
Levitt, Edward J.....Detroit
Levitt, Nathan.....Detroit
Levy, Marvin B.....Detroit
Lewis, Charles T.....Detroit
Lewis, J. Hugh.....Wyandotte
Lewis, L. A.....Detroit
Lewis, John R.....Detroit
Lewis, Wilfrid J.....Detroit
Libbrecht, Robert V.....Dearborn
Lichter, Max L.....Detroit
Lichtwardt, Hartman A.....Detroit
Liddicoat, A. G.....Detroit
Lieberman, B. L.....Detroit
Lightbody, James J.....Detroit
Lignell, Rudolph.....Detroit
Lilly, Charles J.....Detroit
Linkner, Leonard.....Detroit
Linton, James R.....Eloise
Lipinski, Stanley L.....Detroit
Lipkin, Ezra.....Detroit
Lippold, Paul H.....Detroit
Lipton, Raymond.....Detroit
Lipschutz, Louis S.....Eloise
Littlejohn, David.....Dearborn
Livingston, George D.....Detroit
Livingston, George M.....(R) Detroit
Lockwood, Bruce C.....Detroit
Lofstrom, James E.....Detroit
Long, Earle C.....Detroit
Long, John J.....Detroit
Longyear, Harold W.....Detroit
Lookanoff, Victor A.....Detroit
Loranger, C. B.....Detroit
Loranger, Guy L.....Dearborn
Lorber, Joseph H.....Detroit

Lorentzen, Edwin H.....Detroit
Lovas, W. S.....Detroit
Love, W. Thomas.....Detroit
Lovell, B. K.....(M) Detroit
Lowe, Adolf.....Detroit
Lowe, Townsend.....Detroit
Lowrie, Wm. L., Jr.....Detroit
Lowry, George L.....Detroit
Luce, Henry A.....Detroit
Lukas, John R.....Detroit
Lutz, Earl F.....Detroit
Lynn, David H.....Detroit
Lynn, Harvey D.....Detroit
Lyons, L. Mason.....Detroit
Lyons, Wm. Harrington.....Detroit
Lytle, Robert P.....Detroit
Maben, Hayward C., Jr.....Detroit
Mabley, J. Donald.....Detroit
MacArthur, Robert A.....Detroit
MacCracken, Frances L.....Detroit
MacDougall, Orrin P.....Detroit
MacFarlane, Howard W.....Detroit
MacGregor, W. W.....Detroit
Mack, Harold C.....Detroit
MacKenzie, Earle D.....Detroit
MacKenzie, Edward P.....Detroit
MacKenzie, Frank M.....Detroit
Mackenzie, John W.....Grosse Pointe
Mackersie, W. G.....Detroit
MacMillan, Francis B.....Detroit
MacMullen, Frank B.....Detroit
MacQueen, Malcolm D.....Detroit
MacPherson, K. C.....Detroit
Maczewski, John E.....Detroit
Madsen, Martha.....Detroit
Magnell, Ralph C.....Detroit
Maguire, Clarence E.....Detroit
Mahoney, Hugh M.....Detroit
Maibauer, F. P.....Wyandotte
Maino, L. J.....Detroit
Maire, E. D.....Detroit
Mair, Harold U.....Detroit
Malachowski, B. T.....Detroit
Malik, Edward A.....Detroit
Malik, Nur M.....Detroit
Malina, Stephen.....Detroit
Maloney, John A.....Detroit
Mancuso, Vincent.....Detroit
Mandiberg, Jack N.....Detroit
Manning, Morey H.....Detroit
Maples, Douglas E.....Detroit
Mapletoft, Kenneth E.....Detroit
Marcotte, Oliver.....Detroit
Marcus, Daniel B.....Detroit
Marinus, Carleton J.....Detroit
Mark, Jerome.....Detroit
Markoe, Rupert C. L.....Detroit
Marks, Ben.....Detroit
Marks, Morris.....Detroit
Marsh, Alton R.....Detroit
Marshall, James R.....Detroit
Marshall, Millard R.....Detroit
Martin, Edward G.....Detroit
Martin, Elbert A.....Detroit
Martin, I. Herbert.....Detroit
Martin, J. B., Jr.....Detroit
Martin, L. R.....Detroit
Martin, Peter A.....Detroit
Martin, R. M.....Detroit
Martin, Richard D.....Detroit
Martin, Wilbur C.....Detroit
Martinez, P. O.....Detroit
Martner, Edgar.....Detroit
Marwil, T. B.....Detroit
Mason, Percy W.....Detroit
Mateer, John G.....Detroit
Maun, Mark E.....Detroit
May, Earl W.....Alpena
May, Frederick T., Jr.....Detroit
Mayer, E. V.....Detroit
Mayer, Willard D.....Detroit
Maynard, Fred M.....Allen Park
Mayne, Cecil H.....Detroit
McAfee, F. W.....Detroit
McAlpine, Archibald D.....Detroit
McAlpine, Gordon S.....Detroit
McBroom, Russell E.....Detroit
McClelland, Rachel.....Detroit
McClelland, Robert J.....Detroit
McClendon, James J.....Detroit
McClintock, J. J.....Detroit
McClure, Robert W.....Detroit
McClure, Roy D.....Detroit
McClure, Wm. R.....Detroit
McColl, Charles W.....Wyandotte
McColl, Clarke M.....Detroit
McColl, Kenneth M.....Detroit
McCollum, E. B.....Detroit
McCord, Carey P.....Detroit
McCormick, Colin C.....Dearborn
McCormick, C. W.....Detroit
McCullough, Lester E.....Detroit
McDonald, Angus L.....Detroit
McDonald, George O.....Detroit

ROSTER 1948

McDonald, Grant.....Detroit
McEvitt, Wm. G.....Detroit
McFadyen, Hugh A.....Detroit
McGarvah, A. W.....Detroit
McGarvah, Joseph A.....Detroit
McGhee, Richard S.....Detroit
McGillicuddy, Walter E.....Detroit
McGinnis, Daniel H.....Detroit
McGlaughlin, Nicholas D.....Wyandotte
McGough, Joseph M.....Detroit
McGraw, Arthur B.....Grosse Pointe Farms
McGuire, Ivan A.....Detroit
McGuire, M. Ruth.....Detroit
McIntyre, Wm. B.....Detroit
McKean, G. Thomas.....Detroit
McKean, Richard M.....Detroit
McKeever, Robert J.....Detroit
McKenna, Charles J.....Detroit
McKinley, Donald.....Detroit
McKinnon, John D.....Detroit
McLane, Harriett E.....Detroit
McLean, Don W.....Detroit
McLean, Harold G.....Detroit
McPherson, R. J.....Detroit
McQuiggan, Mark R.....Detroit
Mead, John.....Detroit
Meinecke, H. A.....Detroit
Mellen, Hyman S.....Detroit
Menagh, Frank R.....Detroit
Mendelsohn, R. J.....Detroit
Merkel, Charles C.....Grosse Pointe
Merrill, Wm. O.....Detroit
Merritt, Earl G.....Detroit
Metzger, Harry C.....Detroit
Meyer, Ruben.....Detroit
Meyers, M. P.....Detroit
Meyers, P. Marjorie.....Detroit
Meyers, Solomon G.....Detroit
Michels, Julius.....Detroit
Miley, H. H.....Detroit
Millard, Glenn E.....Detroit
Miller, Daniel H.....Detroit
Miller, Elmer B.....Detroit
Miller, Karl.....Detroit
Miller, Kenneth T.....Detroit
Miller, Maurice P.....Trenton
Miller, Myron H.....Detroit
Miller, T. H.....Detroit
Miller, Wm. E.....Detroit
Mills, Clinton C.....Detroit
Mills, Georgia V.....Detroit
Milton, Boynton A.....Inkster
Mintz, Morris J.....Detroit
Mintz, Edward I.....Detroit
Miral, Solomon P.....Detroit
Miro, Morey D.....Detroit
Mishelevich, Sophie.....Detroit
Mitchell, C. Leslie.....Detroit
Mitchell, Gertrude F.....Detroit
Mitchell, Ralston S.....Detroit
Mitchell, W. Bede.....Detroit
Moehlig, Robert C.....Detroit
Mogill, George.....Detroit
Moisides, V. P.....Detroit
Moll, Clarence D.....Detroit
Molner, Joseph G.....Detroit
Moloney, J. Clark.....Birmingham
Mond, Edward.....Detroit
Monfort, Willard.....(L) Highland Park
Montgomery, John C.....Detroit
Monson, Robert C.....Detroit
Montante, Joseph R.....Detroit
Monto, Raymond.....Detroit
Mopper, Coleman.....Detroit
Morand, Louis J.....Detroit
Moriarty, George.....Detroit
Morin, John B.....(L) Detroit
Moritz, H. C.....Detroit
Morley, Harold V.....Detroit
Morley, James A.....Detroit
Moroun, S. J.....Detroit
Morrin, Harold L.....Detroit
Morris, Roger S.....Grosse Pointe
Morrison, Marjorie G. E.....Detroit
Morse, Plinn F.....Detroit
Morton, David G.....Detroit
Morton, J. B.....(L) Detroit
Mosee, W. Jones.....Detroit
Mosen, Max M.....Detroit
Moss, E. B.....Detroit
Moss, Selma S.....Detroit
Mossman, John D.....Detroit
Mott, Carlin P.....Detroit
Moulton, Charles.....Detroit
Muellenhagen, Walter J.....Detroit
Munson, F. T.....Detroit
Munson, Henry T.....Detroit
Muntyan, Andrew.....Detroit
Murphy, D. J.....Detroit
Murphy, Eugene.....Detroit
Murphy, John M.....Detroit
Murphy, Scipio G.....Detroit
Murphy, W. M.....Detroit
Murphy, Robert T.....Detroit
Murray, George M.....Detroit

Murray, William A.....Detroit
Muske, Paul H.....Detroit
Myers, Dan W.....Detroit
Myers, Gordon B.....Grosse Pointe
Nagel, Oscar.....Detroit
Nagle, John W.....Wyandotte
Nahigian, Russell.....Dearborn
Naud, Henry J.....Detroit
Naylor, A. E.....Detroit
Naylor, Arthur H.....Detroit
Neeb, Walter G.....Detroit
Neill, Edwin J.....Detroit
Nelson, Harry M.....Detroit
Nelson, Victor E.....Detroit
Neumann, Arthur J.....Detroit
Newbarr, Arthur A.....Detroit
Newman, Max Karl.....Detroit
Nickels, Albert W.....Detroit
Nielsen, Aage E.....Detroit
Nichamin, Samuel J.....Detroit
Nickerson, Dean.....Detroit
Nigro, Norman D.....Detroit
Nill, John B.....Detroit
Nill, Wm. F.....Detroit
Noble, Wm. C.....Ecorse
Nolan, Bernard E.....Detroit
Nolting, Wilfred S.....Detroit
Norconk, A. A.....Detroit
Norris, Edgar H.....Grosse Pointe
Northrop, Arthur K.....(E) Detroit
Norton, A. B.....Detroit
Norton, Charles S.....Detroit
Noth, Paul H.....Grosse Pointe Farms
Novy, R. L.....Detroit
Nowicki, Joseph A.....Detroit
Nunn, James W.....Detroit
O'Brien, E. J.....Detroit
O'Brien, G. M.....Detroit
O'Donnell, Charles.....Dearborn
O'Donnell, David H.....(E) Detroit
O'Donnell, Dayton H., Jr.....Detroit
Ohmart, Galen B.....Detroit
O'Hara, James T.....Detroit
Okun, Milton H.....Detroit
Olechowski, L. W.....(M) Detroit
Olen, Alex.....Detroit
O'Linn, Francis P.....Detroit
Olmsted, George.....Detroit
Olmsted, Wm. R.....Detroit
Olson, James A.....Detroit
Oman, Cyrus F.....Detroit
Oppenheim, J. M.....Detroit
Orecklin, L.....Detroit
Organ, Fred W.....Detroit
Ormond, John K.....Detroit
Ornstein, Charles.....Detroit
O'Rourke, Paul V.....Detroit
O'Rourke, R. M.....Detroit
Osius, Eugene A.....Detroit
Ott, Harold A.....Detroit
Ottaway, John P.....Detroit
Owen, Clarence I.....Detroit
Owen, James A.....Detroit
Owens, Betty B.....Detroit
Palmer, Alice.....Detroit
Palmer, H. Johnston.....(L) Detroit
Palmer, Milton R.....Detroit
Pangburn, L. E.....Detroit
Panic, Stephen M.....Detroit
Panzner, Edward J.....(E) Detroit
Papp, Sandor D.....Detroit
Parker, Walter R.....(E) Grosse Pointe
Parkinson, Doris.....Detroit
Parr, R. W.....Detroit
Parsons, John P.....Grosse Pointe Park
Pasternacki, Norbert T.....Detroit
Paterson, Walter G.....(L) Detroit
Pawlowski, Jerome.....Detroit
Payne, Eugene.....Detroit
Paysner, Harry A.....Detroit
Peabody, Charles W.....Detroit
Peacock, Lee W.....Highland Park
Pearman, Chas. L. R.....Detroit
Pearse, Harry A.....Detroit
Peck, George A.....Detroit
Peggs, George F.....Detroit
Penberthy, Grover C.....Detroit
Pendy, John M.....Detroit
Pequegnot, Charles F.....(L) Detroit
Perdue, Grace M.....Detroit
Perkin, Frank S.....Detroit
Perkins, Ralph A.....Detroit
Perlis, H. L.....Detroit
Peterman, Earl A.....Detroit
Petix, Samuel C.....Detroit
Pevin, Pauline.....Detroit
Pfeiffer, Rudolph L.....Detroit
Pichette, J. Walton.....Detroit
Pickard, Orlando W.....Detroit
Pierce, Frank L.....Detroit
Pierson, Max J.....Detroit
Pietraszewski, A. W.....Detroit
Pilling, M. A.....Detroit

Pinckard, Karl G.....Dearborn
Pink, Rose M.....Detroit
Pinney, Lyman J.....Detroit
Pino, Ralph H.....Detroit
Piper, Clark C.....Detroit
Piper, Ralph R.....Detroit
Pittman, J. E.....Detroit
Plaggemeyer, H. W.....Detroit
Pliskow, Harold.....Detroit
Podezwa, John W.....Grosse Pointe Woods
Poirier, Ralph A.....Detroit
Pollack, John J.....Detroit
Pool, Walter D.....Detroit
Poos, Edgar.....Detroit
Poretta, Anthony C.....Detroit
Poretta, F. S.....Detroit
Porter, Howard J.....Romulus
Posner, Irving.....Detroit
Pratt, Jean P.....Detroit
Pratt, Lawrence.....Detroit
Prendergast, John J.....Grosse Pointe
Priborsky, Benjamin H.....Detroit
Price, A. H.....Detroit
Price, Alvin E.....Detroit
Proctor, Bruce.....Detroit
Proud, Robert H.....Flat Rock
Pugliesi, Benedetto.....Detroit
Purcell, Frank H.....Detroit
Purves, William L.....Detroit
Quigley, Eugene.....Dearborn
Quigley, William.....Detroit
Quinn, Edward L.....Detroit
Rabinovitch, Bella.....Detroit
Ragnor, Harold F.....Detroit
Rahm, Lambert P.....Detroit
Raiford, Frank P.....Detroit
Raiford, Frank P., Jr.....Detroit
Rand, Morris.....Los Angeles, Calif.
Raskin, John.....Detroit
Raskin, Morris.....Detroit
Rastello, Peter B.....Detroit
Ratigan, C. S.....Dearborn
Reder, Ben.....Detroit
Redfern, Wm. Earl.....Detroit
Reed, E. Hobart.....(A) Detroit
Reed, H. Walter.....Detroit
Reed, Ivor E.....Detroit
Rees, Howard C.....Detroit
Reichling, Raymond J., Jr.....Detroit
Reid, J. Gilbert.....Detroit
Reid, Wesley G.....Detroit
Reiff, Morris V.....Detroit
Reinbolt, Charles A.....(L) Detroit
Reinsh, Ernest R.....Detroit
Reisman, Nathan J.....Detroit
Renaud, G. L.....(E) Detroit
Rennell, Leo P.....Detroit
Reveno, Wm. S.....Detroit
Rexford, W. K.....Detroit
Reye, H. A.....Detroit
Reyner, C. E.....Detroit
Reynolds, Lawrence.....Detroit
Reynolds, R. P.....Detroit
Rezanka, Harold J.....Detroit
Rhoades, F. P.....Detroit
Rice, Harold B.....Detroit
Rice, Meshel.....Detroit
Richardson, Allan L.....Wayne
Richardson, Robert P.....Detroit
Rick, Paul J.....Detroit
Ridge, Ralph W.....Wyandotte
Rieden, James A.....Detroit
Rieckhoff, George G.....Detroit
Rieg, John F.....Detroit
Rieger, John B.....Detroit
Rieger, Mary H.....Detroit
Riseborough, E. C.....Detroit
Rizzo, Frank.....Grosse Pointe Park
Rizzo, Paul.....Detroit
Robb, Ed. L.....Detroit
Robb, Herbert F.....Belleville
Robb, J. Milton.....Grosse Pointe Village
Roberts, Arthur J.....Lincoln Park
Robertson, Stanley B.....Detroit
Robertson, Tom H.....Detroit
Robins, Samuel C.....Detroit
Robinson, Edwin L.....Detroit
Robinson, Fred L.....Dearborn
Robinson, George W.....Detroit
Robinson, Harold A.....Detroit
Robinson, Howard.....Detroit
Robinson, R. J.....Detroit
Rogers, Aaron Z.....Grosse Pointe Woods
Rogers, George E. B.....Detroit
Rogers, James D.....Wyandotte
Rogin, James R.....Detroit
Rogoff, A. S.....Detroit
Rohde, Paul C.....Detroit
Roland, Charles F.....Detroit
Rom, Jack.....Detroit
Roman, Stanley J.....Detroit
Roney, Eugene H.....Detroit
Rosbolt, Oscar P.....Detroit

ROSTER 1948

Rose, Bernard.....Detroit
Rosefield, John L.....Detroit
Rosen, Harold M.....Detroit
Rosen, Robert.....Detroit
Rosenbach, Felix F.....Detroit
Rosenthal, Louis H.....Detroit
Rosenthal, Samuel.....Detroit
Ross, Ben C.....Detroit
Ross, Donald G.....Detroit
Ross, Hyman.....Detroit
Rotarius, E. M.....Detroit
Roth, Edward T.....Detroit
Roth, Theodore I.....Detroit
Rothbart, H. B.....Detroit
Rothman, Emil D.....Detroit
Rothman, H. R.....Detroit
Rottenberg, Leon.....Detroit
Rowda, Michael S.....Detroit
Rowe, Robert.....Detroit
Rowell, Robert C.....Eloise
Rowell, Wilfred J.....Detroit
Rucker, Julian J.....Detroit
Ruedemann, A. D.....Detroit
Rueger, Milton J.....Detroit
Rueger, Ralph C.....Detroit
Runge, Edward F.....Dearborn
Rupprecht, Emil F.....Detroit
Ruskin, I. W.....Detroit
Ruskin, Samuel H.....Detroit
Russell, John C.....Detroit
Rutzen, Arthur C.....Detroit
Rydzewski, Joseph B.....Detroit
Ryerson, Frank L.....Detroit

Sack, A. G.....Detroit
Sa'di Lutfi.....Detroit
Sadowski, Roman.....Detroit
Sage, Bernard A.....Dearborn
Sage, Edward O.....(L) Detroit
Sage, Thomas.....Detroit
Sager, E. L.....Detroit
St. Amour, Hector J.....Detroit
St. Louis, R. J.....River Rouge
Sakorraphos, Stelios N.....Detroit
Salchow, Paul T.....Detroit
Salowich, John N.....Allen Park
Saltstein, Harry C.....Detroit
Sand, Harry H.....Detroit
Sander, I. W.....Detroit
Sanders, Alex W.....Detroit
Sanderson, Alvord R.....Grosse Pointe Park
Sanderson, Suzanne.....Detroit
Sandler, Nathaniel.....Detroit
Sands, G. E.....Detroit
Sandweiss, David J.....Detroit
Sapala, M. Andrew.....Detroit
Sargent, William R.....Detroit
Sarracino, John R.....Detroit
Sank, John J.....Detroit
Sauter, Simon H.....Detroit
Savignac, Eugene M.....Detroit
Scarney, Herman D.....Detroit
Schaefer, Robert L.....Detroit
Schaeffer, Martin.....Detroit
Schembeck, I. S.....Detroit
Schenden, A. J.....Melvindale
Schiller, A. E.....Detroit
Schinagel, Geza.....Detroit
Schirack, Ray.....Detroit
Schkloven, Norman.....Detroit
Schlacht, George F.....Romulus
Schlafer, Nathan H.....Detroit
Schlemer, John H.....Detroit
Schlesinger, Henry.....Detroit
Schmaltz, John D.....Detroit
Schmidt, Harry E.....Detroit
Schmidt, Milton R.....Trenton
Schmier, Burton L.....Detroit
Schmitt, Norman L.....Detroit
Schneck, Robert J.....Detroit
Schneider, Curt P.....Detroit
Schoenfield, Gilbert D.....Detroit
Scholes, Daniel R.....Detroit
Schooten, Sarah S.....Detroit
Schorr, Robert L.....(E) Detroit
Schreiber, Frederic.....Detroit
Schroeder, Carlisle F.....Detroit
Schulte, Carl H.....Detroit
Schultz, Ernest C.....Detroit
Schultz, Robert F.....Detroit
Schwartz, Ben.....Detroit
Schwartz, Louis A.....Detroit
Schwartz, Oscar D.....Detroit
Schwartzberg, Joseph A.....Detroit
Schweigert, C. F.....Detroit
Sciarrino, Stanley V.....Detroit
Scott, R. J.....Detroit
Scott, William J.....Grosse Pointe Farms
Screen, Raymond J.....Trenton
Scruton, Foster D.....Detroit
Seabury, Frank P.....Eureka Springs, Ark.
Secord, Eugene W.....Detroit
Seeley, James B.....Dearborn
Seeley, Ward F.....Detroit

Segar, Lawrence F.....Detroit
Seibert, Alvin H.....Grosse Pointe Park
Seiferlein, Archie L.....Detroit
Selby, C. D.....Detroit
Sellers, Charles W.....Detroit
Sellers, Graham.....Detroit
Sengpiel, Gene.....Detroit
Serrester, Bernard F.....Detroit
Sewell, George S.....Detroit
Shafarman, Eugene.....Detroit
Shaffer, Joseph H.....Detroit
Shaffer, Loren W.....Detroit
Shaffer, Royce R.....Detroit
Shannon, Wm. F.....Detroit
Shapiro, I. Allen.....Detroit
Shapiro, Jacob.....Detroit
Shapiro, Oscar U.....Detroit
Shapiro, Reuben I.....Detroit
Sharrer, Charles H.....Detroit
Shaw, Norman D.....Dearborn
Shaw, Robert G.....(L) Detroit
Shawhan, H. K.....Detroit
Sheldon, John A.....Detroit
Shellhamer, Claire S.....Detroit
Shelton, C. F.....Detroit
Sheppard, Emma L. W.....Center Line
Sherman, Louis L.....Pecayune, Miss.
Sherman, Wm. L.....Detroit
Sherrin, Edgar R.....Detroit
Sherwood, De Witt L.....Detroit
Shewchuk, Alexander P.....Detroit
Shields, W. L.....Detroit
Shifrin, Peter G.....Detroit
Shiovitz, Louis.....Detroit
Shippey, M. R.....Eloise
Shipton, W. Harvey.....Detroit
Shlain, Benjamin.....Detroit
Shore, O. J.....Detroit
Shotwell, Carlos W.....Detroit
Shulak, Irving B.....Detroit
Shumaker, Edw. J.....Detroit
Shurly, Burt R.....(E) Detroit
Siddall, Roger S.....Detroit
Sieber, Edward H.....Dearborn
Siefert, John L.....Detroit
Siefert, Wm. A.....Detroit
Siegel, Henry.....Detroit
Sill, Jack A.....Detroit
Silverman, I. Z.....Detroit
Silver, Israel W.....Detroit
Silverman, Max.....Detroit
Silverman, M. M.....Detroit
Simmons, Donald R.....Detroit
Simon, Emil R.....Detroit
Simon, Heinz G.....Wyandotte
Simpson, C. E.....Detroit
Sinclair, James W.....Detroit
Singer, Floyd W.....Dearborn
Sippola, George W.....Detroit
Sisson, John M.....Detroit
Skinner, W. Clare.....Detroit
Sklover, I. J.....Detroit
Skrzycki, Stephen S.....Detroit
Skully, E. J.....Detroit
Sladen, Frank J.....Grosse Pointe
Slabette, Vincent E.....Detroit
Slate, Raymond N.....Detroit
Slaughter, Fred M.....Detroit
Slaughaupt, J. G.....Detroit
Slazinski, Leo W.....Detroit
Slipson, Edith.....Detroit
Slevin, John G.....Detroit
Sliwin, Edward P.....Detroit
Sluzky, Joseph.....Detroit
Small, Henry.....Detroit
Smathers, Homer M.....Detroit
Smeck, Arthur R.....Detroit
Smith, Charles E.....Detroit
Smith, Clarence V.....Detroit
Smith, Claude A.....River Rouge
Smith, F. Janney.....Detroit
Smith, Gerrit C.....Detroit
Smith, Henry L.....Detroit
Smith, J. Allen.....Detroit
Smith, James A.....Detroit
Smyka, Edward J.....Detroit
Smyth, Charley J.....Eloise
Snedeker, Bernard C.....Detroit
Snow, L. W.....Northville
Snyder, Arthur M.....Detroit
Sobel, Robert A.....Detroit
Sokolov, Raymond A.....Detroit
Somers, Donald C.....Detroit
Sonda, Lewis P.....Detroit
Sorock, Milton L.....Detroit
Spademan, Loren C.....Detroit
Spalding, Edward D.....Detroit
Sparling, Harold I.....Northville
Sparling, Irene M.....Northville
Speck, Carlos C.....Detroit
Spector, Maurice J.....Detroit
Spero, Gerald D.....Detroit
Sperry, Frederick L.....Detroit
Spiro, Adolph.....Detroit
Springborn, B. R.....Detroit

Sprunk, Carl.....Detroit
Sprunk, John P.....Detroit
Spurrier, Ethelbert.....Detroit
Squires, W. H.....Detroit
Stafford, Frank W. J.....Detroit
Stalker, Hugh.....Grosse Pointe
Stamell, Meyer.....Detroit
Staniszewski, Casimir.....Detroit
Stanton, James M.....Detroit
Stanton, Myron.....Detroit
Stapleton, Wm. J., Jr.....(L) Detroit
Starrs, Thomas C.....Detroit
Staub, Howard P.....Detroit
Stearns, Alex B.....Grosse Pointe Woods
Steele, Hugh.....Detroit
Stefani, E. L.....Detroit
Stefani, Raymond T.....Detroit
Stein, Albert H.....Detroit
Stein, Emory.....Detroit
Stein, James R.....Ferndale
Stein, Saul C.....Van Dyke
Steinbach, Henry B.....Detroit
Steinberger, Eugene.....Detroit
Steiner, Frederick.....Garden City
Steiner, Gabriel.....Detroit
Steiner, Louis J.....Detroit
Steinhardt, Milton J.....Detroit
Stellhorn, Chester E.....Detroit
Stellhorn, Mary Christine.....Detroit
Sterba, Richard.....Detroit
Sterling, Lawrence S.....Detroit
Sterling, Robert R.....Detroit
Stern, Charles A.....Detroit
Stern, Harry L.....Detroit
Stern, Leonard H.....Detroit
Stern, Louis D.....Detroit
Stevenson, Edward L.....Detroit
Stewart, Harry L.....Detroit
Stewart, Thomas O.....Detroit
Stirling, Alex M.....Detroit
Stith, Dwight E.....Detroit
Stockwell, B. W.....Detroit
Stofer, Bert E.....Detroit
Stokfisz, T.....Detroit
Stout, Lindley H.....Detroit
Straith, Claire L.....Detroit
Strand, Martin E.....Detroit
Stricker, Henry D.....Detroit
Strickroot, Fred L.....Detroit
Strohschein, Don F.....Detroit
Stryker, Joan C.....Grosse Isle
Stryker, Walter A.....Wyandotte
Stubbs, C. T.....Detroit
Stubbs, Harold W.....Detroit
Stuecheli, Milton B.....Grosse Pointe
Sugar, David I.....Detroit
Sugar, H. Saul.....Detroit
Sullivan, Hugh A.....Detroit
Summers, Wm. A.....Detroit
Summers, Wm. S.....Detroit
Surbis, John P.....Detroit
Sutherland, J. M.....Detroit
Swanson, Carl W.....Detroit
Swanson, Cleary N.....Detroit
Swanson, Robert G.....Detroit
Sweeney, Donald, Jr.....Detroit
Swift, Karl L.....Detroit
Switzer, Bertrand C.....Detroit
Sylvan, Melvin M.....Van Dyke
Szappanyos, Bela T.....Detroit
Szedja, J. C.....Detroit
Szladek, Frank J.....Wyandotte
Szmiel, A. J.....Detroit
Talbot, Frank G.....Detroit

Tamblyn, E. J.....Detroit
Tapert, Julius C.....Detroit
Tasker, Helen.....Detroit
Tassie, Ralph N.....Detroit
Tatellis, Gabriel.....Detroit
Taylor, Ivan B.....Detroit
Taylor, Nelson M.....Grosse Pointe
Taylor, Reu Spencer.....(L) Detroit
Tazzioli, Henry A.....Detroit
Tear, Malcolm J.....Detroit
Teitelbaum, Myer.....Detroit
Tenaglia, Thomas A.....Ecorse
Tenerowicz, Rudolph G.....Detroit
Test, Frederick C., II.....Mt. Clemens
Texter, Elmer C.....Detroit
Thaler, Wm. J.....Detroit
Thompson, Alderman.....Detroit
Thompson, Arthur Lee.....Detroit
Thompson, H. E.....Detroit
Thompson, H. O.....Detroit
Thompson, W. A.....Detroit
Thomson, Alexander.....(E) Detroit
Thornell, Harold E.....Detroit
Thorstad, Merrill J.....Detroit
Thosteson, George C.....Detroit
Tichenor, E. D.....Detroit
Toepel, Otto T.....(E) Detroit
Tomsu, Charles L.....Detroit
Top, Franklin H.....Detroit
Townsend, Frank M.....Detroit

ROSTER 1948

Tregenza, W. Kenneth.....Detroit
Troester, George A.....Detroit
Trombino, James F.....Detroit
Trombley, Bryan.....Detroit
Trombley, Joseph J., Jr.....Detroit
Truszkowski, Edward G.....Detroit
Trythall, S. W.....Detroit
Tulloch, John.....Detroit
Tupper, Roy D.....Detroit
Turbett, Claude W.....Detroit
Turcotte, Vincent J.....Detroit
Turkel, Henry.....Detroit
Turnbull, Jack V.....Detroit
Tyson, Wm. E. E.....(L) Detroit
Ujda, Chester J.....Detroit
Ulbrich, Henry L.....Detroit
Ulrich, Willis H.....Detroit
Umphrey, Clarence E.....Detroit
Usher, Wm. Kay.....Detroit

Vale, C. Fremont.....Detroit
Van Baalen, M. R.....Detroit
Van Becelaere, Lawrence H.....Ecorse
Van Eck, James E.....Detroit
Van Gundy, Clyde R.....Detroit
Van Nest, A. E.....Detroit
Van Rhee, George.....Detroit
Van Riper, Steven L.....Detroit
Vardon, Colin C.....Detroit
Vardon, Edward M.....Detroit
Vasu, V. O.....Detroit
Vincent, James Le Roi.....Detroit
Voegelin, Adolph E.....Detroit
Vogel, Hymen A.....Detroit
Vokes, Milton D.....Detroit
Vollmar, G. Kenneth.....Detroit
Von Der Heide, E. C.....Detroit
Vossler, A. E.....Detroit
Vreeland, C. Emerson.....Detroit

Waddington, Joseph E. G.....(E) Detroit
Waggoner, C. Stanley.....Detroit
Waggoner, Lyle G.....Detroit
Wainger, M. J.....Detroit
Wainstock, Michael.....Detroit
Wakeman, E. M.....Dearborn
Waldbott, George L.....Detroit
Walker, Enos G.....Detroit
Walker, J. Paul.....Detroit
Walker, Leo Whitney.....Detroit
Walker, Roger V.....Detroit
Wallace, S. Willard.....Detroit
Walls, Arch.....Detroit
Walser, Howard C.....Detroit
Walsh, Charles R.....Detroit
Walsh, Francis P.....Detroit
Walters, Albert G.....Detroit
Waltz, Frank D. B.....Detroit
Waltz, Paul J.....Detroit
Ward, George F.....Detroit

Warden, Horace F. W.....Detroit
Warner, P. L.....Detroit
Warren, Irving A.....Detroit
Warren, Wadsworth.....Detroit
Wasserman, Lewis C.....Detroit
Waszak, Charles J.....Detroit
Watson, Douglas J.....Detroit
Watson, Harwood G.....Detroit
Watson, J. Edwin.....Detroit
Watson, Robert W.....Detroit
Watts, Frederick B.....Detroit
Watts, John C.....Detroit
Watts, John J.....Detroit
Wayne, M. A.....Detroit
Weaver, Clarence E.....Detroit
Weaver, Delmar F.....Grosse Pointe
Weber, Karl W.....Detroit
Webster, John E.....Detroit
Weed, Milton R.....Detroit
Wehenkel, Albert M.....Detroit
Weiner, M. B.....Detroit
Weingarden, David H.....Detroit
Weinstein, Jacob.....Detroit
Weisberg, A. Allen.....Detroit
Weisberg, Harry.....Detroit
Weisberg, Jacob.....Detroit
Weisenthal, Irvin.....Detroit
Weiser, Frank A.....Detroit
Weiss, C. P.....Detroit
Weiss, Jack I.....Detroit
Weiss, J. G.....Detroit
Welch, John H.....Columbus, Ohio
Weller, Charles N.....Detroit
Wells, Martha.....Detroit
Weltman, Carl G.....Detroit
Wendel, Jacob S.....Detroit
Wenzel, Jacob F.....Detroit
Weston, Bernard.....Detroit
Weston, Earl E.....Detroit
Weston, Horace L.....Detroit
Weyher, Russell F.....Detroit
Whalen, Neil J.....Detroit
Wharton, Thomas V.....Wyandotte
Wheeler, Stewart C.....Detroit
Whinnery, Randall A.....Detroit
White, Milo R.....Detroit
White, Milton W.....Detroit
White, Prosper D., Jr.....Detroit
White, Theodore M.....Detroit
Whitehead, L. S.....Detroit
Whitehead, Walter K.....Detroit
Whiteley, Robert K.....Detroit
Whitney, Elmer L.....Detroit
Whitney, Rex E.....Detroit
Whittaker, Alfred H.....Detroit
Wiant, John L.....Detroit
Wickham, A. B.....(L) Detroit
Wiechowski, Henry E.....Detroit
Wiener, I.....Detroit
Wiener, Morton.....Detroit
Wietersen, Fred K.....Detroit

Wight, Fred B.....Detroit
Wilcox, Leslie F.....Detroit
Wilhelm, Seymour.....Detroit
Wilkinson, Arthur P.....Detroit
Williams, C. J.....Detroit
Williamson, John C.....Detroit
Wills, J. N.....Detroit
Wilner, Irvin.....Detroit
Wilson, Andrew.....Detroit
Wilson, Gerald A.....Detroit
Wilson, M. C.....Detroit
Wilson, Stuart C.....Detroit
Wilson, Walter J.....(E) Detroit
Wilson, W. J., Jr.....Detroit
Wiren, Lennart W., Jr.....Detroit
Wishropp, E. A.....Detroit
Wisner, Harold E.....Detroit
Wissman, H. C.....Dearborn
Wittenberg, Arthur A.....Detroit
Wittenburg, Sydney S.....Detroit
Witter, Frank C.....Detroit
Witter, Joseph A.....Detroit
Witus, Carl.....Detroit
Witus, Morris.....Detroit
Witwer, Eldwin R.....Detroit
Wolfe, Max O.....Detroit
Wollank, Helen Wilson.....Detroit
Wollenberg, Robert A. C.....Detroit
Wood, Kenneth A.....Detroit
Woodburne, H. L.....Detroit
Woodry, Norman L.....Detroit
Woods, H. B.....Brown City
Woods, W. Edward.....Detroit
Woodworth, Wm. P.....Detroit
Worzniak, Joseph J.....Wyandotte
Wreggit, W. R.....Detroit
Wright, Charles.....Detroit
Wright, Lance S.....Detroit
Wruble, Joseph.....Detroit
Wunsch, Richard E.....Detroit
Wygant, Thelma.....Dearborn

Yesayan, H. G.....Detroit
Yott, William J.....Detroit
Young, Donald A.....Detroit
Young, Donald C.....Detroit
Young, Lloyd B.....Detroit
Young, Viola M.....Detroit

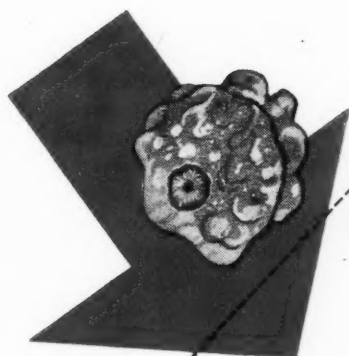
Zemens, Joseph L.....Detroit
Zbudowski, A. S.....Hamtramck
Zbudowski, Myron B.....Detroit
Zemens, Joseph L.....Detroit
Zielinski, Charles J.....Detroit
Zinn, George H.....Detroit
Zinterhofer, John, Jr.....Detroit
Zinterhofer, Louis.....Detroit
Zlatkin, Louis.....Detroit
Zonniss, Marian.....Detroit
Zukowski, Sigmund A.....Detroit

Wexford County

Daugherty, R.....Cadillac
Davidson, John G.....Cadillac
Holm, Augustus.....Leroy
Holm, Benton.....Burlington, Vt.
Inman, J. C.....Lake City
Landy, George R.....Cadillac
Lomman, Ralph.....Manton

McCall, James H.....Lake City
McManus, Edwin.....Mesick
Masselink, H. J.....McBain
Merritt, C. E.....Manton
Moore, G. P.....Cadillac
Moore, Sair C.....Cadillac
Murphy, Michael R.....Cadillac

Purdy, Calvin E.....Buckley
Seltzer, Sol Norris.....Redlands, Calif.
Showalter, Lawrence E.....Cadillac
Smith, Fred R.....Lake City
Smith, Wallace J.....Cadillac
Tornberg, Gordon C.....Cadillac



...now endemic in the U.S.?

Formerly considered a tropical disease, amebiasis is more recently reported^{1,2} as "extremely common" and even "endemic" in this country.

Because early treatment has such an important bearing on prognosis, investigators stress the importance of prompt recognition through careful stool examination.

Destructive to the cysts of *Endamoeba histolytica* and especially valuable in sterilizing "cyst-carriers" is the high-iodine-containing amebacide, DIDOQUIN.

Diodoquin³ "is well tolerated....It can readily be taken by ambulant patients and, therefore, eliminates the necessity of hospitalization."



SEARLE



DIODOQUIN.®

(5, 7-diiodo-8-hydroxyquinoline)


RESEARCH
IN THE SERVICE
OF MEDICINE

1. Chalgren, W. S., and Baker, A. B.: Tropical Diseases: Involvement of Nervous System, Arch. Path. 41:66 (Jan.) 1946.
2. Browne, D. C.; McHardy, G., and Spellberg, M. A.: Statistical Evaluation of Amebiasis, Gastroenterology 4:154 (Feb.) 1945.
3. Manson-Bahr, P.: Some Tropical Diseases in General Practice: "A Post-War Legacy." Glasgow M. J. 27:123 (May) 1946.



BEFORE YOU BUY—

**Use This
Diathermy
Check List . . .**

- () **DOES IT HAVE THIS SEAL?**
Council-Acceptance means that it has met rigid requirements for clinical efficiency. 
- () **IS IT FCC-APPROVED?**
(In Canada: Is it CDT-Approved?)
A Type-Approval certificate number is issued on all FCC-Approved apparatus.
- () **IS IT APPROVED BY UNDERWRITERS' LABORATORIES?**
The "UL" seal indicates safe construction, meets insurance requirements.
- () **IS IT CRYSTAL CONTROLLED?**
Crystal control means precision frequency control and stability of operation.
- () **IS MANUFACTURER EXPERIENCED?**
Responsibility does not end with the sale. Your diathermy should be purchased for the future from an experienced maker.

**The Answer is "YES" to all Questions
about the BURDICK X 85
SHORT WAVE DIATHERMY**

**FOR EFFICIENT
SHORT WAVE APPLICATION . . .**

The Burdick Contour Applicator. Smooth, unbroken treatment surface which curves to fit body surfaces. One continuous coil provides more even distribution of heat.

See the Burdick X 85 Short Wave Diathermy in the showrooms of your local Burdick dealer, or write us direct, The Burdick Corporation, Milton, Wisconsin, for descriptive literature.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue, Detroit 1, Michigan

Woman's Auxiliary

TWENTY-SECOND ANNUAL CONVENTION

The twenty-second annual convention of the Woman's Auxiliary to the Michigan State Medical Society will be held in the Fort Shelby Hotel, Detroit, September 21, 22 and 23, 1948.

A most cordial invitation is extended to the wives of all doctors attending the session of the Michigan State Medical Society to participate in all convention events. Whether Auxiliary members or not, the wives of physicians will be most welcome.

Auxiliary headquarters will be in the main lobby of the Fort Shelby Hotel, and the Wayne County Auxiliary is providing a Hospitality Room, the facilities of which are to be at the disposal of guests at all times.

Please register early and purchase your tickets for all social functions. These will be sold only at Auxiliary headquarters.

Registration Hours

Tuesday, September 21.....	9 a.m.- 4 p.m.
Wednesday, September 22.....	9 a.m.- 4 p.m.
Thursday, September 23.....	9 a.m.-12 m.

Program

Tuesday, September 21

- 6:00 p.m. Subscription dinner—Sky Room
- 8:00 p.m. Bridge

Wednesday, September 22

- 11:00 a.m. Pre-Convention Board Meeting—River Room
- 12:30 p.m. Luncheon—Sky Room
- 5:00 p.m. Get-Acquainted Hour honoring the National President, Mrs. Luther K. Kice—State Presidents—Music by "The Dukes"
- 6:00 p.m. Banquet—Spanish Room
- Speakers—Haven Emerson, M.D., New York; Warren W. Furey, M.D., Chicago

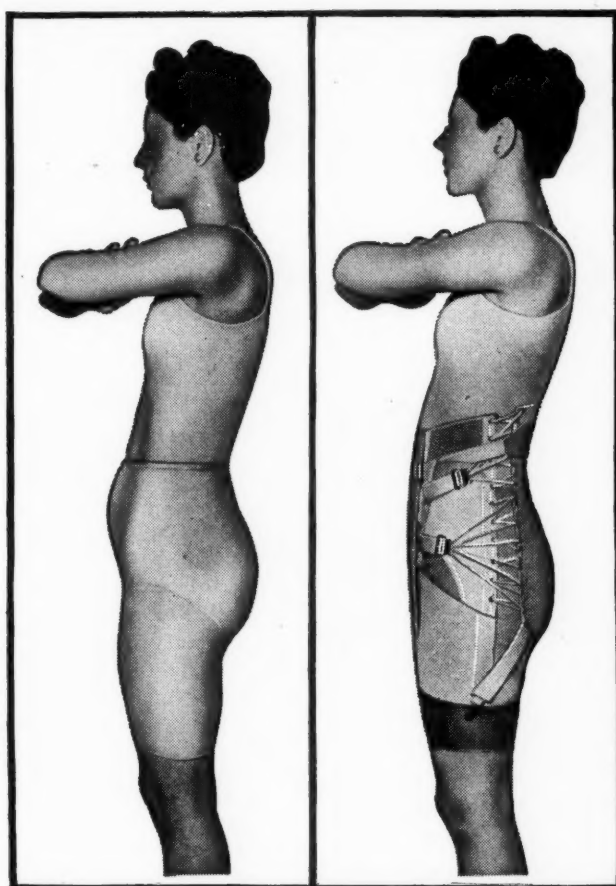
Thursday, September 23

- 10:00 a.m. Annual Meeting—Spanish Room
- 12:30 a.m. Annual Luncheon—Crystal Room
- Speaker: E. F. Sladek, M.D., Traverse City, President-Elect, MSMS. Subject: "Working Together."
- "Ye Aulde Album Style Show" by members of Wayne County Auxiliary

Local Committee on Convention Arrangements

Mrs. L. Paul Sonda is chairman of the Committee on Convention Arrangements, with Mrs. Frederick G. Buesser and Mrs. William L. Foster acting as co-chairmen.

Those in charge of special activities are: *Credentials and Registration*—Mrs. William L. Foster; *Social*—Mrs. Norman O. LaMarche; *Hospitality*—Mrs. Frederick G. Buesser; *Publicity*—Mrs. Clarence L. Candler; *Finance*—Mrs. Robert L. Novy; *Program*—Mrs. William L. Sherman; *Flowers*—Mrs. Audrey O. Brown; *Pages*—Mrs. Milton A. Darling; *Courtesy*—Mrs. Howard P. Doub; *Printing*—Mrs. Herman D. Scarney.



Patient of intermediate type of build; roentgenograms showed spondylolisthesis, grade 1, with congenital defects. Symptoms developed after a fall on the ice during pregnancy.

Same patient after application of support. Patient reported relief from pain which was confined to the back and called attention to the ease and comfort in the wearing of the support.

Aid in conservative treatment when the fifth lumbar vertebra slips on the sacrum

...advantages of the **CAMP** lumbosacral supports

... **THE WELL BONED BACK**—Curves in and under the gluteal muscles, relieving the tension of these muscles on their attachments.

Wide shaped piece of material at top (fastening in front) holds the support still more closely about the lumbar spine.

... **THE SIDE LACING ADJUSTMENT** — Assists in steadying the pelvic girdle.

It also allows for reinforcing with aluminum steels or Camp Spinal Brace.

The elastic releases make for comfort.

S. H. CAMP AND COMPANY • JACKSON, MICHIGAN

World's Largest Manufacturers of Scientific Supports

Offices in New York • Chicago • Windsor, Ontario • London, England

JULY, 1948

Say you saw it in the *Journal of the Michigan State Medical Society*

793



NEWS MEDICAL

"A good thing to remember, and a better thing to do, is to work with the construction gang and not with the wrecking crew."

* * *

The Michigan Allergy Society at a meeting held May 20, 1948, elected the following officers: Samuel J. Levin, M.D., president; Meryl M. Fenton, M.D., vice president; and Homer A. Howes, M.D., secretary-treasurer.

* * *

Harry C. Saltzstein, M.D., and Walter S. Johnson, M.D., of Detroit, have a paper published in the March, 1948, issue of *Gastroenterology*, "Carcinoma of the Pancreas: Operative Problems."

* * *

Periodic Health Examination.—The modern physician's function is not only to treat disease, but to prevent disease and to offer sound helpful advice that can make life more pleasant and comfortable.

* * *

The Michigan Society of Anesthesiologists will hold its annual meeting and election of officers in Detroit on

September 22, 1948. This will be a dinner meeting. The place of meeting will be announced later.

* * *

V.A. announces that contracts totalling \$4,517,767 for the construction of a veterans hospital at Saginaw, Michigan, have been awarded. The hospital will have 200 general medical and surgical beds.

* * *

The Kent County Medical Society's Bulletin of April contained a very interesting "history of compulsory health insurance in Great Britain, France, and Germany." The expansion of compulsory health insurance in these three foreign countries was graphically portrayed in the charts.

* * *

Only 33 per cent of hospitals this year have their full quota of interns, while 25 per cent have less than half, and 12.5 per cent of all approved hospital have not been able to obtain any, according to the *Bulletin* of the Kalamazoo Academy of Medicine, May, 1948, number.

* * *

The New York State Society of Anesthesiologists announces its third postgraduate assembly, December 9-10,

(Continued on Page 796)



Vernor's

GINGER ALE

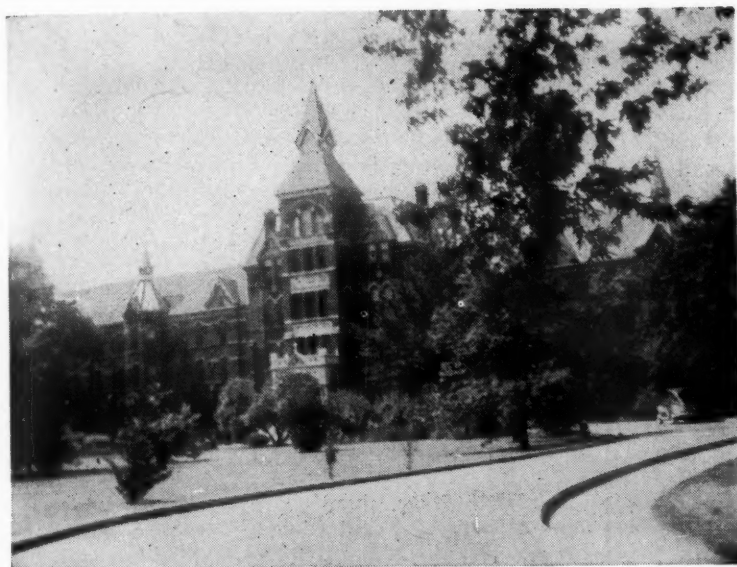
Developed by Michigan's First Registered Pharmacist
Recommended by Eminent Michigan Physicians
FLAVOR MELLOWED 4 YEARS IN WOOD



A PREFERRED BEVERAGE FOR HOME AND HOSPITAL

• Licensed by State of Michigan, Dept. of Mental Health • Registered by American Medical Association

ST. JOSEPH'S RETREAT



Founded in 1860

*Under direction of
Daughters of Charity
of St. Vincent de Paul*

Newly reorganized and modernized for individualized care and treatment of the nervous and mentally ill and alcoholics.

*Martin H. Hoffmann, M. D.
Medical Superintendent*

23200 Michigan
DEARBORN • near Detroit
LOgan 1-1400

THE CHICAGO MEDICAL SOCIETY

Announces

POSTGRADUATE COURSES

To Be Held in Chicago

Leading Teachers From All Over the U. S.

HEMATOLOGY AND NEUROLOGY

September 13-18, 1948

CARDIOVASCULAR AND RESPIRATORY DISEASES

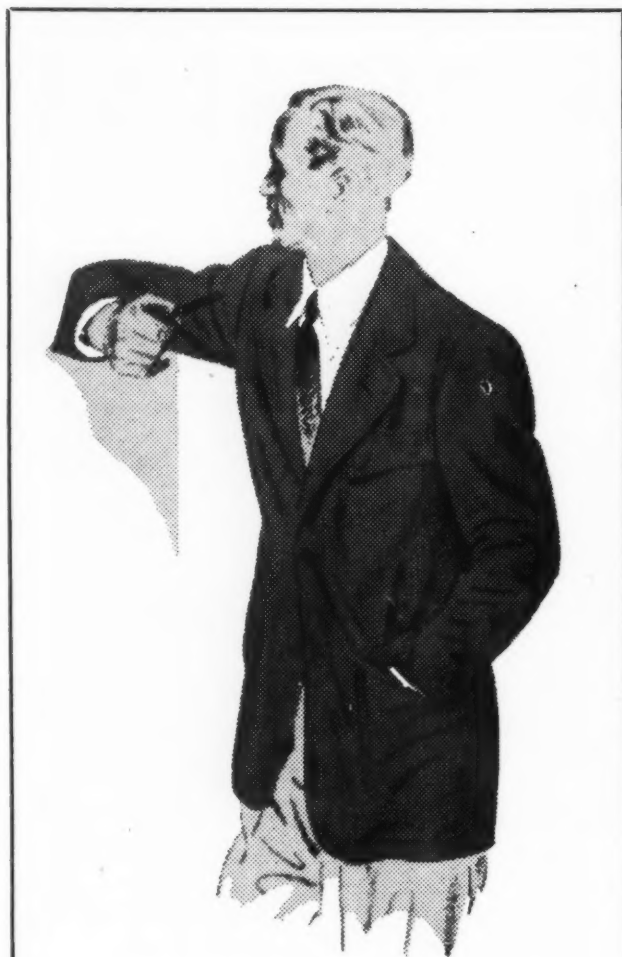
September 20-25, 1948

Both Courses Limited To 100 And Open To Physicians In
Good Standing In Their Local Medical Societies. Fee \$50.00 Each Course.

Send Applications To

DR. WILLARD O. THOMPSON, CHAIRMAN COMMITTEE ON P.G. EDUCATION
CHICAGO MEDICAL SOCIETY, 30 NO. MICHIGAN, CHICAGO 2. ILLINOIS

(Continued from Page 794)



*Summertime Leisure
requires Slacks,
Sport Jackets, Casual
Shirts, and Cool
Straw Hats in the
Quality Manner*

WHALING'S
MEN'S WEAR • 617 WOODWARD
DETROIT 26 • MICHIGAN

1948, at Hotel New Yorker, New York City. For complete program write Lewis H. Wright, M.D., general chairman, Suite 1503, 745 Fifth Ave., New York 22.

* * *

The American Congress of Physical Medicine will hold its twenty-sixth annual session at the Statler Hotel, Washington, D. C., September 7, 8, 9, 10, 11. For full information write A.C.P.M., 30 North Michigan Ave., Chicago 2, Illinois.

* * *

The thirty-fourth Clinical Congress of the American College of Surgeons will be held in Los Angeles, at the Biltmore Hotel, October 18 to 22, 1948. For program and further information write A. C. of S., 40 E. Erie St., Chicago 11, Illinois.

* * *

At the St. Clair County Medical Society Annual All-Day Clinic, held at St. Clair Inn, on June 18, W. D. Gatch, M.D., and associates of Indianapolis, Indiana, presented the program. One hundred and thirty-seven attended a very interesting meeting.

* * *

J. Earl McIntyre, M.D., secretary of the Michigan State Board of Registration in Medicine, who is also a member of the National Board of Medical Examiners of the United States, was re-elected to a six-year term on the National Board at its annual meeting on May 22, 1948, in Philadelphia.

* * *

The First World Health Assembly began in Geneva, Switzerland, June 24, when the World Health Organization became a permanent agency of the United Nations. U. S. headquarters for WHO are at 350 Fifth Avenue, New York 1. This organization has been approved by the American Medical Association.

* * *

Good Health is
Good business for agriculture;
Good business for labor;
Good business for business;
Good business for everybody.

—National Planning Association, Pamphlet No. 62, 800 21st N.W., Washington 6, D.C.

* * *

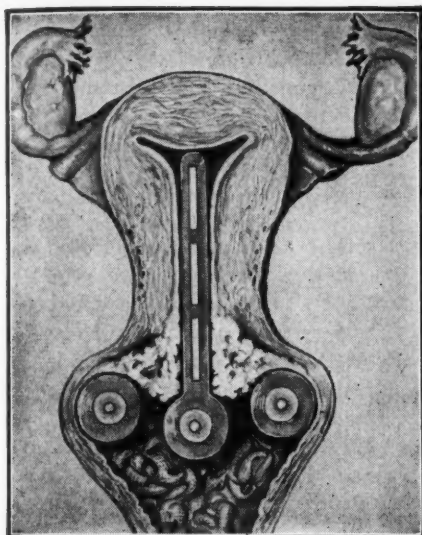
The 1948 Assembly and Convocation of the United States Chapter, International College of Surgeons, will be held at Kiel Auditorium, St. Louis, November 16-19, 1948. For copy of program write R. M. Klemme, M.D., Professor of Surgery, St. Louis University, 4952 Maryland Ave., St. Louis, Missouri, general chairman of arrangements.

* * *

Theodore G. Klumpp, M.D., president of Winthrop-Stearns Inc., was recently elected president of the American Pharmaceutical Manufacturers Association at its annual convention in Havana, Cuba. Dr. Klumpp, who is a graduate of Princeton University and of Harvard Medical School, is chairman of the Board of Governors

(Continued on Page 798)

IMPROVE YOUR RESULTS IN CANCER OF THE CERVIX



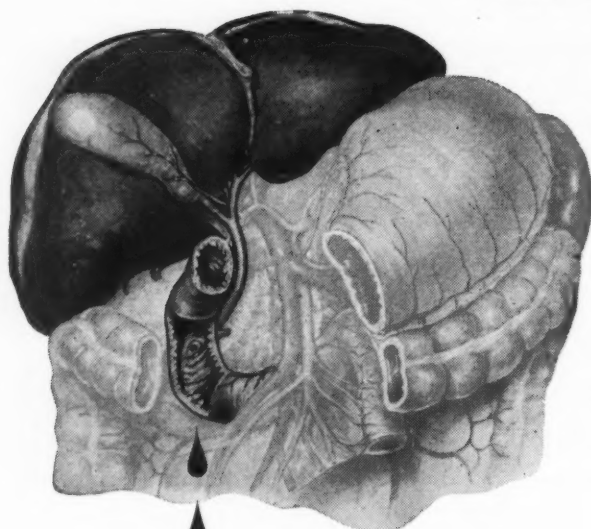
CONSISTENTLY high percentages of 5-year cures in Carcinoma of the Cervix are reported by institutions employing the French technique illustrated here. Ametal rubber applicators encase the heavy primary screens and provide ideal secondary filtration to protect the vaginal mucosa. Radium or Radon applicators for the treatment of Carcinoma of the Cervix and provided with Ametal filtration are available exclusively through us. Inquire and order by mail, or preferably by telegraph or telephone reversing charges. Deliveries are made to your office or hospital for use at the hour you may specify.

THE RADIUM EMANATION CORPORATION
GRAYBAR BUILDING Tel. MUrray Hill 3-8636 NEW YORK, N. Y.



DRINK
Coca-Cola
TRADE MARK REG.

**You trust
its quality**



OBJECT: DRAINAGE

In discussing the management of chronic cholecystitis without stones, Albrecht states:

"The object of the medical procedure is to assist in draining an infected organ."*

The specific hydrocholeretic action of Decholin (chemically pure dehydrocholic acid) accomplishes this purpose.

Decholin induces bile secretion which is thin and copious, flushing the passages from the liver to the sphincter of Oddi, and carrying away infectious and other accumulated material.

HOW SUPPLIED: Decholin in $3\frac{3}{4}$ gr. tablets. Packages of 25, 100, 500 and 1000.

*Albrecht, F. K.: *Modern Management in Clinical Medicine*, Baltimore, The Williams and Wilkins Co., 1946, p. 170.



Decholin

BRAND • REG. U. S. PAT. OFF.

AMES COMPANY, INC.
ELKHART, INDIANA

(Continued from Page 796)

of the National Vitamin Foundation. Before becoming associated with Winthrop, Dr. Klumpp taught internal medicine at Yale Medical School and served as secretary of the Council on Pharmacy and Chemistry of the AMA.

* * *

Child Death Rate Falls 60 Per Cent.—The death rate of children one to four years old has dropped 60 per cent since 1930, according to Dr. Louis I. Dublin, statistician of the Metropolitan Life Insurance Co.

He noted drastic reductions in deaths resulting from diarrhea, enteritis, childhood diseases and pneumonia. —*Detroit Free Press*, June 1, 1948.

* * *

Harry L. Stern, M.D., assumed the office of president of the West Side Medical Society for the year 1948-49; R. F. Fenton, M.D., was chosen as president-elect; O. A. Capano, M.D., secretary, and S. O. Cotton, M.D., treasurer, at the WSMS annual meeting held April 14, 1948. L. J. Gariepy, M.D., retiring president, presented the exaugural address.

* * *

Chicago Medical Society offers two postgraduate courses: one in hematology and neurology, September 13-18; and another in cardiovascular and respiratory diseases, September 20-25. Both sessions will be held in Thorne Hall, Northwestern University Medical School. For full information write Postgraduate Medical Education Committee Chairman, Chicago Medical Society, 30 N. Michigan Ave., Chicago 2, Illinois.

* * *

Senate Resolution 249, introduced into the Senate Health Committee on June 4, calls for a cessation of activity on all health bills until March 15, 1949—with the interval being used for study of health legislation by the Senate Labor Committee.

This resolution was adopted by the Senate and thus postpones any action on proposed health legislation—until after the election!

* * *

A postgraduate course on "Modern Treatment of Fractures and Other Traumatic Conditions" will be held at Massachusetts General Hospital, under the auspices of Harvard Medical School, from September 20 to 29, 1948. This course is covered by the GI Bill of Rights. For further information write Assistant Dean, Courses for Graduates, Harvard Medical School, 25 Shattuck St., Boston, Mass.

* * *

Ernest B. Howard, M.D., has taken up his duties as assistant secretary of the American Medical Association. Dr. Howard was graduated from Harvard College and Boston University Medical School, 1936, and from Harvard School of Public Health, 1941. He served as director of the Division of Venereal Disease in the Massachusetts Department of Public Health, and during most of the war he acted as assistant director of the Division of Venereal Diseases in the Surgeon General's Office, U. S. Army. Since December, 1945, Dr. How-

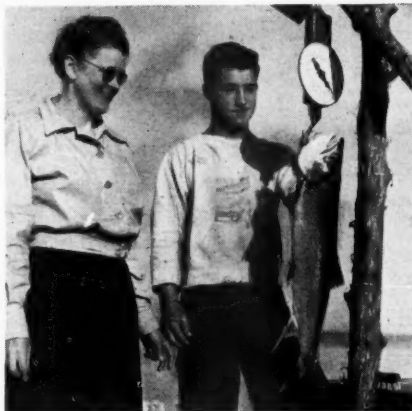
(Continued on Page 800)

PLAN YOUR SUMMER HOME NOW DOCTOR!!

Would You Like This?

West Bay Shores

Do you long to be isolated on the "bigwater"? If so I have the most attractive spot in Traverse Peninsula on Lake Michigan. High and dry with white sand beach. Heavily timbered with pine and hardwoods. Throw the yacht anchor in the front yard or move it a few hundred feet to natural Bowers harbor. This harbor is safe and long enough to land your Seebee on. Yours for the asking—Small plat and illustrated brochure. Write today.



*Relax with the nicest of people where
it will never be crowded.*

West Point Shores

Do you want the safe cool crystal clear water of wonderful Torch Lake, third most beautiful lake in the world? I have large sandy beach lots with ample cedar and spruce shade after you cut your cottage logs on your own lot. No swamp even near you. A natural for canoe and small boats. Excellent for sailing and a yacht club near you. Good fishing with hardly a mosquito, which you can't do on most Michigan lakes. Highly Restricted from \$1500.00 up. Terms, if you wish.

Write or Phone—Howard D. Pavey, 537 E. Baker Street, Flint, Mich.

APPAREL for HOT WEATHER

*... requires a unique combination of cool comfort
plus style-correctness. Scores of professional men visit us
for cool clothing ... secure in the knowledge that what
they get will be right in every way!*

KILGORE and HURD
1259 WASHINGTON BLVD IN THE BOOK TOWER
Detroit's Most Correct Address

When You Want To Be Sure

Dispensing plays a vital role at Cummins. A successful, qualified dispenser has spent years acquiring his knowledge.

Mr. S. H. Cummins and Mr. Wm. B. Wood, of Cummins Optical Company, have a combined experience of over fifty years as qualified dispensers.

You want to know your patients are getting the **best** dispensing service available. You can be **sure** they are when your work is done by these experienced, qualified men.

CUMMINS OPTICAL COMPANY

CAdillac 7344

76 W. Adams

4th Floor Kales Building
(Facing Grand Circus Park)

DETROIT 26, MICHIGAN

OFFICE HOURS:

DAILY 9 TO 5—MONDAYS TO 7 P. M.

(Continued from Page 798)

ard has been director of the Health Mission to Peru, South America, of the Institute of Inter-American Affairs within the Department of State. All success, Dr. Howard, in your new duties.

* * *

The Genesee County Medical Society has endorsed a Red Cross plan to establish local blood donation centers throughout Michigan, and has offered its co-operation and services in setting up such a center in Flint, to serve the three major hospitals of that city. This project is designed to take up a serious deficiency in the amount of plasma in Michigan, since it is being used faster than it is being donated.

* * *

Veterans Administration desires the services of full-time and part-time physicians in its regional offices. In the employment of part-time physicians, other than specialists, the services of comparatively recent medical graduates—veterans preferred—are being sought. For further information write Peter A. Volpe, M.D., Branch medical director, Veterans Administration, 52 S. Starling St., Columbus 8, Ohio.

* * *

"A horse can't pull while kicking,

"This fact I merely mention—

"And he can't kick while pulling,

Which is my chief contention."

"Convert kicking into pulling and the county society will have an active and energetic worker."—Medical Society of the State of Pennsylvania, Public Relations Newsletter of June 6, 1948.

* * *

E. F. Sladek, M.D., Traverse City, president-elect of the Michigan State Medical Society, was keynote speaker at the opening session of the two-day school for food and beverage handlers of Grand Traverse-Leelanau counties, held in Traverse City May 29-30. Seven hundred and thirty-eight food handlers from the region attended the course. Dr. Sladek is chairman of the Community Health Committee of the Traverse City Chamber of Commerce.

* * *

Senate Committee to Study Health Problems.—The Senate Committee on Labor and Public Welfare is directing its Subcommittee on Health (Senator Smith, Chairman) to continue its study of the health problems of the nation and be able to report on March 15, 1949. The Subcommittee is authorized to develop a research staff and to hold hearings. An amount of \$10,000 from the contingent fund of the Senate is allowed to cover expenses. Because of this decision the Committee will not submit a report at this time on S.1320 and S.545.

* * *

Holy Cross Hospital, Detroit.—The annual staff stag party of Holy Cross Hospital was held at Lochmoor Country Club on Wednesday, April 21, 1948. Approximately forty members of the staff were present.

The second annual golf tournament of Holy Cross Hospital was held at Lochmoor Country Club on May 26,

(Continued on Page 802)



THE HAVEN SANITARIUM, INC.

1850 PONTIAC ROAD

ROCHESTER, MICHIGAN

Telephone 9441

A private hospital 25 miles north of Detroit for
the diagnosis and treatment of mental illness.

LEO H. BARTEMEIER, M.D., CHAIRMAN OF THE BOARD
GRAHAM SHINNICK, MANAGER

ORTHOPEDIC and SURGICAL APPLIANCES

ARTIFICIAL LIMBS

ELASTIC HOSIERY

SURGICAL BELTS

ARCH SUPPORTS

CRUTCHES

TRUSSES

SPLINTS

BRACES

MAIL
ORDERS

Detroit — Call Oper-
ator for
Interzone 6041
No Toll Charge

PROMPT
SERVICE

Phone
Birmingham
4817



Manufactured and Fitted By:

Becker Orthopedic Appliance Co.

Otto K. Becker, Gen. Mgr.

639 Elm

BIRMINGHAM, MICH.

Send for Completely Illustrated Catalog

Prolonged Estrogenic Effect

Estromone Aqueous Suspension contains crystalline estrogens, chiefly estrone, in a suitable form for prolonged therapeutic action and for ease of administration. Since no vegetable oils are present, allergic manifestations are not encountered as in the case of estrogens in oil solution; pain or induration at the site of injection is rare.

The intramuscular injection of Estromone Aqueous Suspension provides a depot at the site of injection from which the estrogen is gradually absorbed. Such a repository injection may be compared to the implantation of small pellets since gradual absorption of the hormone in the blood stream provides a prolonged effect.

SUPPLIED: 1 cc. ampules in boxes of 12, 25, and 100 ampules, and in 5 cc. and 10 cc. multiple dose vials. Each cc. contains 20,000 international units of crystalline mixed estrogens equivalent to 2 mg. estrone.

ESTROMONE

AQUEOUS SUSPENSION



THE G. A. INGRAM COMPANY
4444 Woodward Ave. Detroit 1, Mich.

(Continued from Page 800)

1948. The winner of the Chief of Staff Trophy was Dr. William Yott, winner for the second successive year.

Winner of the President's trophy, Kicker's Handicap, was Dr. Edward Krass. Winner of the main door prize, Dr. William Flora.

* * *

Rebates and Kickbacks, Old Stuff—1850.—At the third annual meeting of the Medical Society of the State of Pennsylvania held in Philadelphia, April 17, 1850, the following resolution was adopted: "That this Society regard all collusion between physicians and apothecaries, whether with a view to pecuniary profit or patronage, as opposed to every principle of that moral code which the profession has adopted for its government; and that no physician known to be guilty of such collusion, should be entitled to the confidence and professional intercourse of medical men."

* * *

Advance registration will save your time.—At the MSMS Annual Session, the registration desk will open Tuesday, September 21 at 1:00 p.m. This pre-convention registration is for the convenience of those doctors of medicine who desire to avoid waiting in line Wednesday morning—and perhaps missing a portion of the first lecture (by Frank H. Lahey, M.D., Boston). Doctors who register Tuesday afternoon will be given instant service, without a moment's wait.

If possible, register Tuesday afternoon, September 21, between the hours of 1:00 and 5:00 p.m., and save your time.

* * *

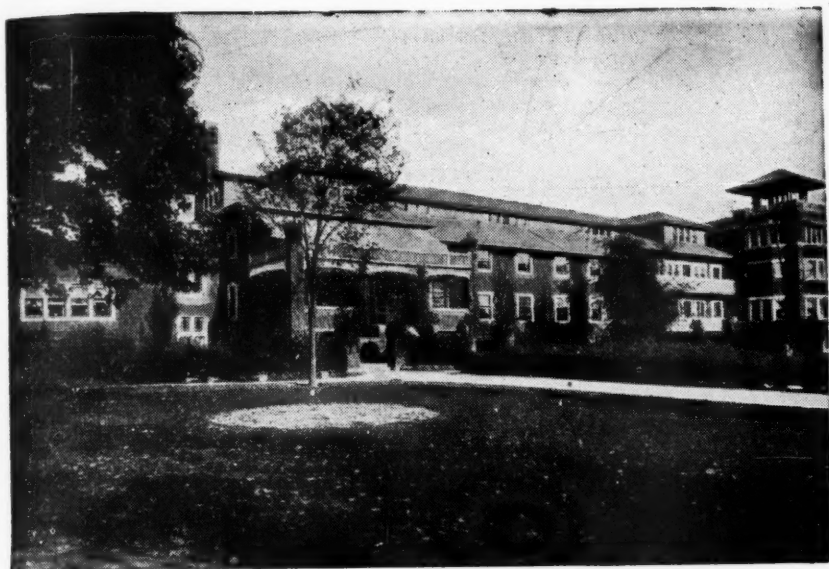
The Ingham County Medical Society's Executive Committee approved the following report of its Public Relations Committee, submitted on April 6:

1. Panel system for emergency calls discarded.
2. Efforts to establish better press relations, telephone listing revision, and other methods to be used instead.
3. Inter-professional Committee to have further study.
4. Scientific programs of the Society to be released, after editing, to the STATE JOURNAL.
5. Radio releases to WJIM, WILS, WKAR.
6. Probst Drug Co.'s "Drama of Medicine" over WILS, 6:15 on Thursdays—to be edited by PR Committee.

* * *

V.A. will release to physicians who are treating veterans the syphilis records of those army personnel who were treated for this disease while in active service—provided authorization for the release of the data is given by the veteran-patient. Details of treatment, results of spinal fluid examinations, and blood serologies are incorporated in the records. Requests for the résumé, plus the authorization from the veteran, should be addressed to the Dermatology and Syphilology Section, Veterans Administration, Munitions Building, Washington 25, D. C. Be sure to include the veteran's service serial number and other identifying information (such as the date of

(Continued on Page 804)



North Shore Health Resort Winnetka, Illinois

*on the Shores of
Lake Michigan*

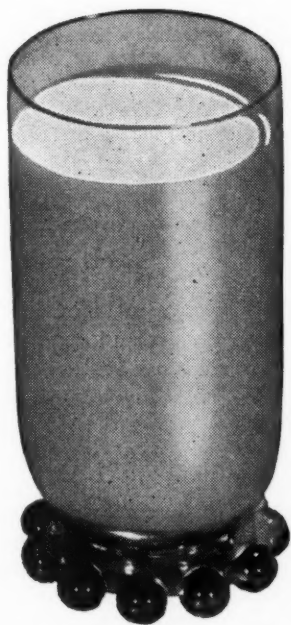
A completely equipped sanitarium for the care of
nervous and mental disorders, alcoholism and drug addiction
offering all forms of treatment, including electric shock.

SAMUEL LIEBMAN, M.S., M.D.

225 Sheridan Road

Medical Director

Phone Winnetka 211



Buttermilk...

a beverage with unique values

Buttermilk in the bottle is in the same state which sweet milk reaches when it is first acted upon by the digestive juices. Therefore it is partially pre-digested. Moreover, there is little chance of it forming hard, tough curd-masses in the intestinal tract.

These are some of the unique values of buttermilk in combating certain intestinal derangements among infants and adults, in relieving constipation and alleviating stomach disorders. For buttermilk of uniformly high quality, made with pasteurized milk, may we suggest Sealtest Buttermilk?



THE MEASURE OF QUALITY

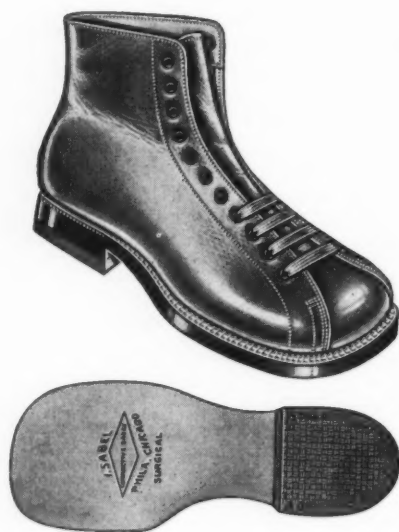
DETROIT CREAMERY

•

EBLING CREAMERY

SABEL'S SURGICAL SHOES

FOR
INFANTS, CHILDREN,
MISSES, YOUTHS, GROWING GIRLS,
BOYS AND MEN



Sabel's Surgical Shoes are laced to the toe, are for use on braces and spastic cases. Steel shanks, broad heels.

Sabel's Surgical Shoes are carried in pattern and leather matching the Club Foot Shoes so that where required, even in split sizes, they can be fitted to the other foot.

The Sabel Line includes, in addition to the Surgical Shoes the Pre-walker, Brace Pigeontoe and Club Foot Shoes.

Stuart J. Rackham Co.

CORRECT SHOES FOR MEN AND WOMEN
2040 PARK AVE. DETROIT 26, MICH.

Opposite Women's City Club

Stuart J. Rackham
President

Clyde K. Taylor
Manager

CADILLAC 3820

(Continued from Page 802)

enlistment, the date of discharge, rank, and organization). The résumés will be furnished in approximately two weeks from date of receipt of request and the signed authorization.

* * *

Seek Data on Child Accidents.—The Metropolitan Life Insurance Company, which has done considerable advertising in the interest of the nation's health, is now focusing attention on the problem of accidents in the pre-school age group as a major cause of mortality.

The company is interested in county medical societies which have taken action in accident prevention to the extent of creating an accident committee or of making some other committee responsible for study of accidents and their prevention.

The AMA Bureau of Health Education is trying to procure information for the company. The Bureau would appreciate any information pertaining to county medical society accident prevention committees or activities.

* * *

The Kalamazoo Academy of Medicine at its Board of Directors meeting of May 26, adopted the following rules for hospital emergency service:

Emergency Service

The physicians and hospitals of this community are prepared to provide emergency service to the public on the following basis:

1. Hospital emergency service is maintained to save life. Minor injuries or illnesses should be cared for in a doctor's office.
2. Hospital nurses will assist the patient to obtain medical care by calling the patient's own doctor.
3. In case the patient has no doctor, or his own doctor cannot be reached, the nurse will summon the doctor on emergency call.
4. While awaiting a doctor's orders, nurses are only allowed to give first aid.

* * *

The Statement.—"We, the members of the Indianapolis Medical Society, do hereby resolve that the welfare of the medical profession, its scientific advancement and the furtherance of public interest are continuously being harmed by organizations which demand compulsory attendance of physicians at meetings.

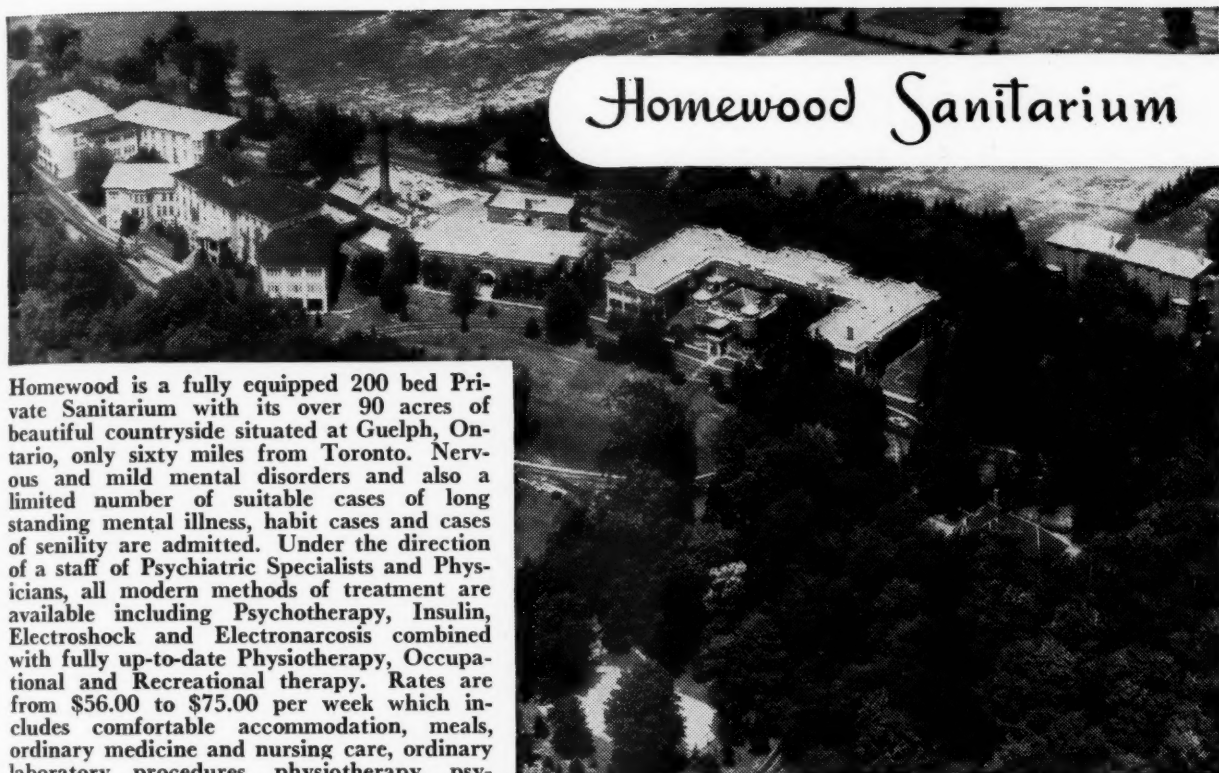
"To this end we instruct our duly elected delegates to the Indiana State Medical Association to introduce proper measures at the next meeting of the House of Delegates to the effect that all organizations which require compulsory attendance at their meetings no longer be approved by the American Medical Association; and, we further instruct our delegates to use their utmost influence to obtain passage of such a resolution at the earliest opportunity before the House of Delegates of the American Medical Association.

"The Indianapolis Medical Society furthermore instructs its secretary to send a copy of this resolution to every component Medical Society in the United States."

* * *

Living Costs Rise Faster Than Doctors' Fees.—In his new study entitled "Comparative Increases in the Costs

(Continued on Page 806)



Homewood Sanitarium

Homewood is a fully equipped 200 bed Private Sanitarium with its over 90 acres of beautiful countryside situated at Guelph, Ontario, only sixty miles from Toronto. Nervous and mild mental disorders and also a limited number of suitable cases of long standing mental illness, habit cases and cases of senility are admitted. Under the direction of a staff of Psychiatric Specialists and Physicians, all modern methods of treatment are available including Psychotherapy, Insulin, Electroshock and Electronarcosis combined with fully up-to-date Physiotherapy, Occupational and Recreational therapy. Rates are from \$56.00 to \$75.00 per week which includes comfortable accommodation, meals, ordinary medicine and nursing care, ordinary laboratory procedures, physiotherapy, psychotherapy and occupational and recreational therapy. Write for illustrated folder. F. H. C. BAUGH, M.D.C.M., Medical Supt.

THE HOMEWOOD SANITARIUM OF GUELPH, ONTARIO, LIMITED

Made to Measure Service

SURGICAL CORSETS

SPINAL BRACES

ARTIFICIAL LIMBS

LEG BRACES

Illustrated Catalog and Prescription Pads

Furnished on Request

D. R. COON CO.

4200 WOODWARD AVE.

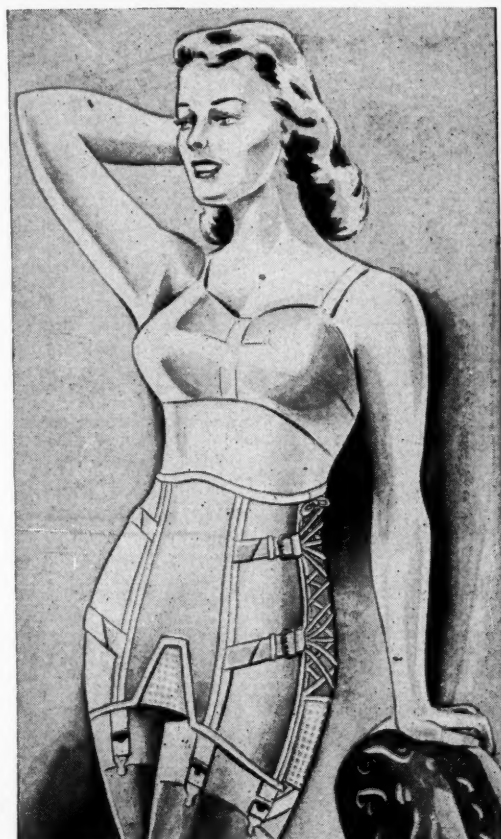
CORNER OF WILLIS

TEMPLE 1-5103

DETROIT 1

Formerly the OTTO K. BECKER CO.

Owned and Managed by D. R. Coon since 1944



Detroit Medical Hospital



7850 East Jefferson Avenue

A private hospital devoted to the diagnosis and treatment of mental and nervous illness, alcoholics and drug addicts. All accepted psychiatric and mental therapies.



Beautiful grounds facing the Detroit River

*Registered by the
American Medical Association*

*Licensed by the
Michigan State Hospital Commission*

DETROIT MEDICAL HOSPITAL
LORAIN 7-7100
7850 E. JEFFERSON AVE.
DETROIT 14 MICHIGAN

(Continued from Page 804)

of Medical Care and the Costs of Living," just off the press, Frank G. Dickinson, Ph.D., director of the AMA Bureau of Medical Economic Research, reports that the cost of living has risen more rapidly than the fees charged by physicians for medical services.

He found that the quantity of medical care received by the American people was at least two thirds more in 1946 than in 1939.

"When the various indexes and ratios are studied," Dr. Dickinson said, "it can be seen that the quantity of medical care received by the American people has probably increased much faster than the increase in the number of physicians. This apparent 'output' per physician doubtless reflects the increasing use of technical assistants.

"Whether one examines the record of total expenditures of the American people for medical care or the prices of significant items during recent years, he comes to the general conclusion that the American people have been fortunate in that the costs of keeping well have not risen as rapidly as the cost of living."

* * *

Rules and Regulations for Cancer Detection Centers.—

1. These Clinics shall be for educational and screening purposes only.
 2. There shall be no distinction between indigent or non-indigent patients. On an educational basis, this is only a problem of referral; the non-indigent are sent to private physicians, the indigent to tumor clinics or other organizations set up to provide medical care for this group.
 3. Examination shall be the same in all hospitals.
 4. The examination shall only consist of:
 - (a) Complete history and a physical examination.
 - (b) There shall be no laboratory work.
 5. There shall be no treatment given at any of these clinics.
 6. The present title "Cancer Detection Clinic" is a misnomer and shall be changed to "Cancer Detection Center" or "Cancer Center."
- Approved by the Council, Wayne County Medical Society, May 17, 1946.

* * *

Navy's New Medical Training Program.—The Surgeon General of the Navy has announced the expansion of the Bureau's professional training program for reserve and regular medical officers, which is similar to the recently expanded Army medical training program. The object is to permit more Navy doctors to meet the requirements for certification by the various American Specialty boards, and to encourage the young doctor to intern under the auspices of the Navy. The following are the important points in this program:

Graduates of Class A medical schools who have been accepted for internship by a hospital approved for such training by the Council on Medical Education and Hospitals of the AMA may be commissioned as lieu-

(Continued on Page 808)

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

★ McKesson

★ WATERLESS METABOLOR

- **Recording**
- **Electric Time Drive**
- **Metabolism Computing Tables**

Compare the features on this amazing new basal unit! You get all the desirable EXTRAS of modern scientific metabolism equipment. The McKesson Waterless Metabolor is a product of many years' experience. Complete literature upon request. **\$304.50**

\$304.50

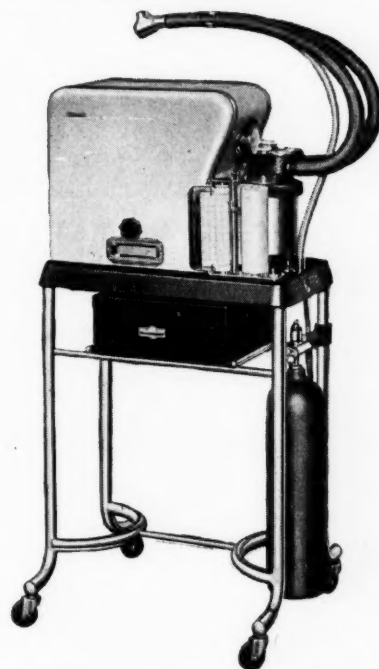
**IMMEDIATE DELIVERY! TRAINED PERSONNEL
FOR DEMONSTRATION, SERVICING**

Noble-Blackmer, Inc.

SURGICAL SUPPLY CENTER

267 W. Michigan Ave.

Jackson, Michigan



All types of Laboratory Service to Physicians since 1925 under same management. Only reliable standard and approved technic is used in all of our examinations. Charge accounts opened to all members. Fees have not been changed since 1937. For the Friedman test rabbits are used. Containers with stamps are furnished.

Physicians' Service Laboratory

Reg. No. 26

610 Karles Bldg.

Detroit, Mich.

Cadillac 7940

ACCIDENT • HOSPITAL • SICKNESS INSURANCE

FOR PHYSICIANS, SURGEONS, DENTISTS EXCLUSIVELY



\$5,000.00 accidental death.....	\$8.00
\$25.00 weekly indemnity, accident	Quarterly
and sickness	
\$10,000.00 accidental death.....	\$16.00
\$50.00 weekly indemnity, accident	Quarterly
and sickness	
\$15,000.00 accidental death.....	\$24.00
\$75.00 weekly indemnity, accident	Quarterly
and sickness	
\$20,000.00 accidental death.....	\$32.00
\$100.00 weekly indemnity, accident	Quarterly
and sickness	

**ALSO HOSPITAL EXPENSE FOR MEMBERS
WIVES AND CHILDREN**

85c out of each \$1.00 gross income used for members' benefits

\$3,000,000.00	\$15,000,000.00
INVESTED ASSETS	PAID FOR CLAIMS

\$200,000.00 deposited with State of Nebraska for protection of our members.

Disability need not be incurred in line of duty—benefits from the beginning day of disability

PHYSICIANS CASUALTY ASSOCIATION

PHYSICIANS HEALTH ASSOCIATION

46 years under the the same management

400 First National Bank Building • Omaha 2, Nebraska



DeNIKE SANITARIUM, Inc.

Established 1893

**ACUTE AND CHRONIC
ALCOHOLISM
AND DRUG ADDICTION**

— Telephones —

GEneva 6333-4

CAdillac 2670

626 E. Grand Blvd., Detroit 7

A. James DeNike, M.D., Medical Superintendent

*A few of the newer pharmaceuticals
which we have in stock for
immediate delivery . . .*

FURACIN

A new chemotherapeutic compound for treatment of wounds and surface infections.

ANTI RH SERUM

A diagnostic agent for the rapid and accurate determination of RH factor in human blood by the microscopic slide agglutination method.

BLOOD GROUPING SERA

(Powdered)

Anti A

Anti B

Literature available on request

The Rupp & Bowman Company

315-319 Superior St.

Toledo, Ohio

(Continued from Page 806)

tenants (junior grade), MC, USNR, and permitted to continue their intern training. They will receive all the pay and allowance of the rank while so serving. After completing their internships, the medical officers must remain on active duty for a period of one year. If they meet the professional, physical and moral requirements, they will be given every encouragement to transfer to the regular Navy.

Interns who have completed the one year of obligated service, and who have transferred to the regular Navy, may be considered for residency training on a competitive basis with other officer personnel of the regular Medical Corps.

Resident physicians now in civilian hospitals, or those accepted for approved residency training, are eligible for commissions in the regular Navy. Those so commissioned will be assigned to duty, with full pay and allowances, in the hospital in which they are already a resident, or to which they have been accepted for residency training. Every attempt will be made to permit residents holding commissions in the regular Navy to complete their training in event of an emergency.

The Navy has at the present time 400 approved residencies and fellowships in the various specialties recognized by the American Specialty Boards in Naval and civilian hospitals. This educational training involving the 400 residencies is divided into two programs.

Information concerning these programs may be obtained by writing to Chief of the Bureau of Medicine and Surgery, Navy Department, Washington 25, D. C.

More Orchids About the Michigan Postgraduate Clinical Institute of March, 1948

H. W. Baker, M.D., of Woodstock, Ontario: "As we left Detroit on the Friday evening, I asked the men in my car what they thought of the Clinic, and we were all agreed with the answer that it was the best we had ever attended. The hospitality given us by the Michigan men was beyond compare, and we all hoped that we would be given an early notice of the next meeting of the Institute in the spring of '49, because we all intend to go back. We thank you very much for the privilege of attending this conference."

Kenneth Murray, M.D., Hamilton, Ontario: "I should like to thank the Michigan Postgraduate Clinical Institute for the excellent continuation course I attended last March. I want to thank you for extending your facilities to us Canadians and to tell you I shall be on hand again next spring. I enjoyed all the program, probably the surgical subjects more as I am a general surgeon. Of course I realize that all branches of medicine must be represented. Especially worth while was the symposium which took place in the evening. Again please accept my thanks for your kind invitation for March, 1949."

C. W. Pennecott, M.D., London, Ontario: "It was indeed a pleasure and a privilege to attend your Michigan Postgraduate Clinical Institute Meeting in March. All of our group of four enjoyed your papers and your wonderful hospitality so much, that we determined, if possible, to make our attendance at your meetings an annual affair. May we hope to see the friendly asso-

(Continued on Page 810)

ARTIFICIAL LIMBS

*New and Improved
Artificial Legs
and Arms*



Precision made, artificial limbs manufactured by us have made Rowley users capable of doing most everything the normal person can do.

**FULL RANGE OF BRACES AND
ORTHOPEDIC APPLIANCES**

**TO. 8-6424
TO. 8-1038**

E. H. ROWLEY CO.

F. O. PETERSON, Pres.

11330 WOODWARD AVE. • DETROIT 2

35 Years in Business

BRANCH: 120 S. DIVISION ST., GRAND RAPIDS



F. O. PETERSON
All work under the
supervision of F. O.
Peterson, President.

J. L. Gaskins, Vice-
Pres.

E. F. Schmitt, Sec'y-
Treas.

Flo-Cillin

(BRISTOL)

*. . . a significant
advance in repository
penicillin therapy.*

Flo-Cillin "96" is a refinement of Bristol's original Flo-Cillin. This is accomplished through change in the manufacturing process and without alteration in formulation. Ninety per cent of patients maintain penicillin blood concentrations equal to or exceeding .03 units per cc. of serum to the 96th hour **after injection** of 1 cc. of Flo-Cillin "96."

Flo-Cillin "96" is a suspension of 300,000 units per cc. of Crystalline Procaine Penicillin G in Peanut Oil gelled with 2% Aluminum Monostearate as a dispersing and absorption-retarding agent. These 300,000 units contain the equivalent of 120 mg. procaine base.

Flo-Cillin "96" requires no refrigeration. It can be stored at room temperature and injection should be made at room temperature.

Flo-Cillin "96" available in rubber stoppered vials containing 10 cc. Each cc. of Flo-Cillin "96" contains 300,000 units of Crystalline Procaine Penicillin G in Peanut Oil gelled with 2% Aluminum Monostearate.

Order Through

**THE MEDICAL SUPPLY CORP.
OF DETROIT**

TEmpLe 1-4588

3502 Woodward Ave., Detroit 1

Non-Cancellable ACCIDENT POLICY

Lifetime Income

*Pays \$50.00 each week
for life, from 1st day
of disability*

Never Before SO MUCH
For SO LITTLE

ANNUAL PREMIUM 59.40

Call Today or Write

Whiting and Whiting

GENERAL INSURANCE
CHERRY 9398

520 FORD BLDG. •

DETROIT 26



HOW TO APPLY A BETTER SCALP PATCH

(1) Squeeze a small amount of Sta-Fast Cohesive on edge of gauze dressing and press to the scalp. Bandages thus applied remain firmly in place—eliminate unsightly, bulky head wrappings, tape and ties. Provide greater patient comfort—better appearance.

(2) Spread a thin coating of Sta-Fast Cohesive over the surface of the scalp patch. Sta-Fast quickly forms a transparent protective film impervious to water, dirt, oil and chemicals. Patches stay clean longer, require less frequent dressing, are neat, comfortable, easy to apply. Save bandaging time and effort. Try Sta-Fast Cohesive. Available through leading Surgical Supply Dealers or write for free sample.

DETROIT FIRST-AID COMPANY

6335 Grand River Ave.

Detroit 8, Mich.

Cook County Graduate School of Medicine

ANNOUNCES CONTINUOUS COURSES

- SURGERY**—Intensive Course in Surgical Technique, two weeks, starting July 19, August 16, September 27.
Surgical Technique, Surgical Anatomy and Clinical Surgery, four weeks, starting August 2, September 13.
Surgical Anatomy and Clinical Surgery, two weeks, starting August 16, September 27.
Surgery of Colon and Rectum, one week, starting September 20, October 18. **Surgical Pathology** every two weeks.
FRACTURES AND TRAUMATIC SURGERY—Intensive Course, two weeks, starting October 25.
GYNECOLOGY—Intensive Course, two weeks, starting September 13, October 11.
Vaginal Approach to Pelvic Surgery, one week, starting September 27.
OBSTETRICS—Intensive Course, two weeks, starting September 27, October 25.
UROLOGY—Intensive Course, two weeks, starting September 27.
MEDICINE—Intensive Course, two weeks, starting October 11.
Personal Course in Gastroscopy, two weeks starting July 12, September 27.
Electrocardiography and Heart Disease, two weeks, starting August 2.
Electrocardiography and Heart Disease, four weeks, starting September 13.
DERMATOLOGY—Formal Course, two weeks, starting October 4.
Clinical Course every two weeks.
OPHTHALMOLOGY—Intensive Course, two weeks, starting September 20.
Refraction Methods, four weeks, starting October 11.
Ocular Fundus Diseases, one week, starting November 15.
OTOLARYNGOLOGY—Intensive Course, two weeks, starting October 18.
General, Intensive and Special Courses in all Branches of Medicine, Surgery and the Specialties
TEACHING FACULTY — ATTENDING STAFF OF COOK COUNTY HOSPITAL
 Address: Registrar, 427 S. Honore St., Chicago 12, Ill.

(Continued from Page 808)

ciation enjoyed by Americans and Canadians on our respective visits to each other's countries grow until it embraces all the Nations of the world? How welcome a change from the present, useless conflict. I wish again to express my appreciation for your kind invitation to Canadians to attend and enjoy your outstanding annual meetings."

J. C. Boyce, M.D., Fremont, Ohio: "I enjoyed the meeting very much, especially because there was so much practical material that is of use to the man in general practice. Usually with most medical meetings one attends these days the material presented is very technical and of little use to the general man. Thank you for your kind invitation; I expect to attend again next year."

E. Grant Berry, M.D., Merlin, Ontario: "The idea back of the Michigan Postgraduate Clinical Institute is very praiseworthy, while the presentation, arrangements and commercial displays were very much worth while, even down to the courtesy and cheerful manners of the attendants. The whole thing, from start to finish, was very enjoyable and instructive. Please be sure that my name is on your list for next year."

H. S. Dunham, M.D., Toronto, Executive Secretary, Ontario Medical Association: "We seek the inclusion of the Ontario Medical Association name on your mailing list for advance information on your future post-graduate meetings."

A. G. Volpe, M.D., Toronto, Ontario: "I would greatly appreciate if you would kindly put me on your mailing list for your next annual Clinical Institute."

NEWER CONCEPTS IN THE DIAGNOSIS OF THE GLAUCOMAS

(Continued from Page 728)

diagnosis of glaucoma simplex possible, since it is the most important ocular disease in relation to blindness, and one whose ravages can be prevented to a large extent by early recognition.

1108 Stroh Bldg. (26)

References

1. Barkan, O.: Glaucoma: classification, causes, and surgical control. *Am. J. Ophth.*, 21:1099, 1938.
2. Bloomfield, S.: Liability tests for chronic simple glaucoma. *Arch. Ophth.*, 38:368, 1947.
3. Gradle, H. S., and Sugar, H. S.: Glaucoma capsulare. *Am. J. Ophth.*, 30:12, 1947.
4. Raeder, J. G.: Untersuchungen über die Lage und Dicke der Linse im menschlichen Auge der physiologischen und pathologischen Zuständen nach einer neuen Methode Gemessen. *Arch. f. Ophth.*, 112:29, 1923.
5. Schmidt, K.: Untersuchungen über allgemeine und lokale Kapillar Endothelstörungen bei Glaukoma simplex. *Med. Klin.*, 24:859, 1928.
6. Sugar, H. S.: Concerning the chamber angle: gonioscopy. *Am. J. Ophth.*, 23:854, 1940.
7. Sugar, H. S.: The mechanical factors in the etiology of acute glaucoma. *Am. J. Ophth.*, 24:831, 1941.
8. Sugar, H. S.: The place of hemorrhagic glaucoma in the etiologic classification of glaucoma. *Arch. Ophth.*, 28:587, 1942.
9. Sugar, H. S.: Anatomic factors that influence the depth of the anterior chamber; their significance. *Am. J. Ophth.*, 25:1341, (Nov.) 1942.
10. Sugar, H. S.: Acute glaucoma: a follow-up study. *Am. J. Ophth.*, 30:451, 1947.
11. Sugar, H. S.: The provocative tests in the diagnosis of the glaucomas. *Am. J. Ophth.*, (to be published).
12. von Graefe, A.: *Arch. f. Ophth.*, 3:456, 1857.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

IDENTIFICATION OF TUMORS, ESSENTIAL GROSS AND MICROSCOPIC PATHOLOGIC FEATURES SYSTEMATICALLY ARRANGED FOR EASIER IDENTIFICATION. By N. Chandler Foot, M.D., Professor of Surgical Pathology, Cornell University Medical College; Surgical Pathologist to New York Hospital. 241 Illustrations. Philadelphia: J. B. Lippincott Co., 1948. Price 6.00.

This is a small book designed to give the essentials of diagnosis of tumors without the necessity of grinding through long complicated works. It is especially for students and younger practitioners. The tumors are considered in the various sections or parts of the body, are systematically described as to source, age and sex, signs and symptoms, gross appearance, microscopic appearance, malignancy, differential diagnosis and metastasis. Pathological sections abound, sometimes several for a single tumor. Methods and materials are explained, making the book especially valuable.

TREATMENT IN GENERAL PRACTICE. By Harry Beckman, M.D., Professor of Pharmacology, Marquette University School of Medicine, Milwaukee, Wisconsin. Sixth Edition. 1129 pages. Philadelphia and London: W. B. Saunders Company, 1948. Price \$11.50.

The teaching of therapeutics is made much more systematic and thorough by study of this text. It is in its sixth edition, which speaks well for the author and the acceptance of his work. The author believes that the art of diagnosis does not carry with it the ability to treat. The latter is a study and enterprise in itself. He claims to be an editor, presenting the material of a host of authors who are mentioned in an extensive bibliography. The subject matter, in general, is presented alphabetically in mentioning the infectious diseases, after which are fluke infestations, worm infestations, allergic diseases, deficiencies, endocrines, and diseases according to systems. The index is profuse. The work is a complete guide for therapeutics of practically all medical conditions.

PHYSIOLOGY OF EXERCISE. By Laurence E. Morehouse, Ph.D., Associate Professor of Physical Education, The University of Southern California; Formerly Research Fellow, Harvard Fatigue Laboratory; and Augustus T. Miller, Jr., Ph.D., Associate Professor Physiology, University of North Carolina Medical School. Illustrated. St. Louis: C. V. Mosby Co., 1948. Price \$4.75.

A study of the reactions of the human body to exercise, and to certain stresses, is an outgrowth of the war period and experience. Muscle contractions and their effects, the use of oxygen in exercise, factors of the speed of recovery from exercise, cardiac output, regulation of the stroke, volume of blood in circulation, every imaginable form of effort and exercise are studied, and their effects



ROMAN CLEANSER
whitens clothes
Safely
GERMICIDE-DISINFECTANT

SODIUM HYPOCHLORITE
PRODUCT OF MANY USES. READ LABEL
Dependable — Convenient — Economical
QUARTS & HALF GALLONS SOLD AT GROCERS

Buy Security Bonds!

Medical Placement

Esther Allen, Director

Cadillac 7051

512 Kales Bldg., 76 West Adams

Detroit 26

A service for the Medical, Dental and Pharmaceutical Professions and their Affiliates in the Research and Social Sciences.



UNSCENTED COSMETICS FOR THE ALLERGIC PATIENT

AR-EX Cosmetics are the only complete line of unscented cosmetics regularly stocked by pharmacies. To be certain that your perfume sensitive patients do not get scented cosmetics, prescribe AR-EX Unscented Cosmetics. SEND FOR FREE FORMULARY.



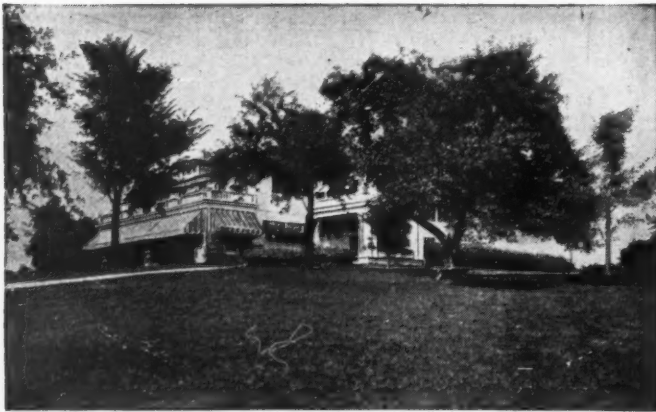
FREE FORMULARY

DR. _____
ADDRESS _____
CITY _____
STATE _____

AR-EX COSMETICS, INC.,

1036 W. VAN BUREN ST.,

CHICAGO 7, ILL.



The Mary E. Pogue School

Complete facilities for training Retarded and Epileptic children educationally and socially. Pupils per teacher strictly limited. Excellent educational, physical and occupational therapy programs.

Recreational facilities include riding, group games, selected movies under competent supervision of skilled personnel.

Catalogue on request.

G. H. Marquardt, M.D.
Medical Director

Barclay J. MacGregor
Registrar

26 GENEVA ROAD, WHEATON, ILL.
(Near Chicago)

on the good condition of the human body are noted. Much of the book is devoted to the heart and circulatory system, but the pulmonary system is just as important, and both are studied in regard to every effect of breathing, moisture, volume of air, regulation of respiration. The kidneys are not forgotten. In fact, this is a compact but complete text for athletics and athletes.

SYNOPSIS OF PEDIATRICS. By John Zahorsky, A.B., M.D., F.A.C.P., Professor of Pediatrics and Director of the Department of Pediatrics, St. Louis University School of Medicine, and Pediatrician-in-Chief to the St. Mary's Group of Hospitals; Fellow of the American Academy of Pediatrics; Assisted by T. S. Zahorsky, B.S., M.D. Senior Instructor in Pediatrics, St. Louis University School of Medicine, and Assistant Pediatrician to the St. Mary's Group of Hospitals. Fifth Edition, with 158 Text Illustrations and 9 Color Plates. St. Louis: C. V. Mosby Co., 1948. Price \$5.50.

As indicated in the preface, this book is a summary. Used for that purpose it should continue to be of value to the student and to the practitioner. While of necessity the work is considerably condensed, it does provide the essential information concerning the diseases of children ordinarily presented to the family doctor.

It should provide the general practitioner with a source of quick authoritative information concerning pediatric conditions.

The book does not presume to give a complete discussion of any condition, reserving that particular field to the larger recognized textbooks.

The fifth edition has been considerably revised, especially concerning treatment. This has necessitated enlarging the volume, and also deletion of some older material.

H. F. B.

OSTEOCHONDRITIS DISSECANS AND OSTEOCHONDROMATOSIS

(Continued from Page 736)

36. Phemister, D. B.: The causes of and changes in loose bodies arising from the articular surface of the joint. *J. Bone & Joint Surg.*, 6:278-315, 1924.
37. Polacco, E.: Free bodies in the hip joint. *Int. Abstr. Surg.*, 50:456, 1930.
38. Poverman, David: Locking of the hip joint due to osteochondroma of the lesser trochanter. *J. Bone & Joint Surg.*, 18:1080-1081, 1936.
39. Ray, R. B., and Coughlin, E. J.: Osteochondritis dissecans of the talus. *J. Bone & Joint Surg.*, 29:697-706, 1947.
40. Ribbing, S.: Zur Ätiologie der Osteochondrosis dissecans. *Acta radiol.*, 25:732-755, 1944.
41. Rixford, E.: Osteochondromatosis. *Ann. Surg.*, 92:673-680, 1930.
42. Ross, W. T.: Osteochondritis dissecans of the supratrochlear septum. *J. Bone & Joint Surg.*, 29:514-515, 1947.
43. Sato, N.: Osteochondromatosis of hip joint and adjacent bursa. *Okayama-Igakkaï-Zasshi.*, 51:915-916, 1939.
44. Stein, G. H., and Lowry, F. C.: Osteochondritis dissecans. *Am. J. Surg.*, 64:328-332, 1944.
45. Strange, T. B.: Osteochondritis dissecans. *Am. J. Surg.*, 63:144-155, 1944.
46. Weeks, A., and Delprat, G. D.: Case of osteochondroma of left gluteal region. *S. Clin. North America*, 10:1223-1229, 1930.
47. Wiberg, G.: Osteochondromatosis of hip joint. *Nord. med. tidskr.*, 16:1194-1198, 1938.
48. Wilmoth, C.: Osteochondromatosis. *J. Bone & Joint Surg.*, 23:367-374, 1941.
49. Vincent G., and Vincent, J.: L'ostéochondromatose synoviale du genou. *J. de Soc. méd. de Lille*, 49:405, 1931.

Meyer Institute of Body Culture

Massage and Swedish Movements—Medical Gymnastics

Separate Departments for
Ladies and Gentlemen

TRinity 2-2243-4

330 New Center Building, Detroit 2, Michigan

NEW

MEDICAL EQUIPMENT

Furniture — Instruments — Microscopes

WE BUY SELL AND TRADE

6562 Linwood
Detroit 8

MEDICAL EQUIPMENT EXCHANGE

Telephone
TY. 8-4950

USED